

CUMBERLAND COUNTY COUNCIL

EDUCATION COMMITTEE

REPORT

OF THE

SCHOOL MEDICAL OFFICER

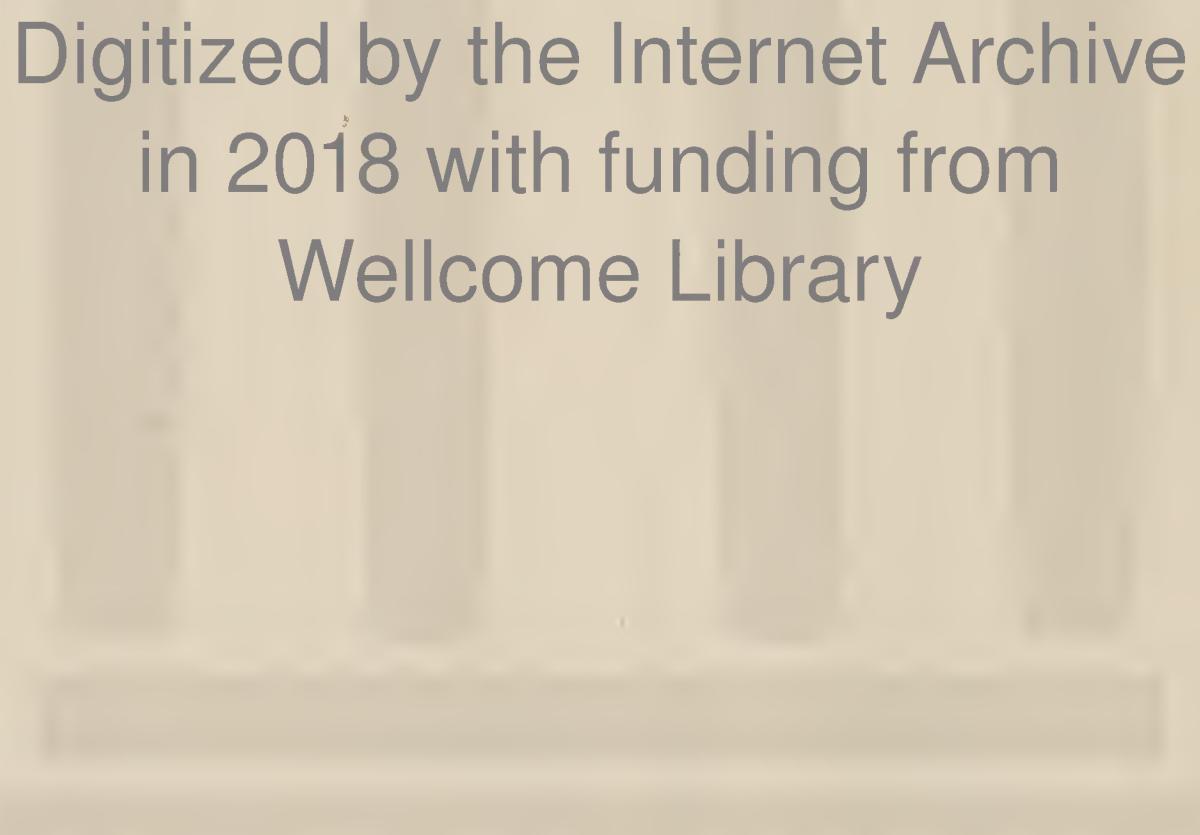
F. H. MORISON,, M.D., D.P.H., &c.,

ON THE

**Medical Inspection of
School Children.**

FOR THE YEAR ENDED

DECEMBER 31st, 1922.



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CUMBERLAND COUNTY COUNCIL.

To the Chairman and Members of the Education Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in presenting my Fifteenth Annual Report on the Medical Inspection and Treatment of School Children, for the year ended 31st December, 1922.

Even at the present time there appears to be an entire misconception of the true advantages to be gained from the Medical Inspection of School Children.

Prior to 1908 the Public Health Service concerned itself, and almost wholly confined its energies to, those matters which related to the health of the community as a whole, such as sewage disposal, water supplies, etc. It has been becoming more evident from year to year, to those who have been engaged in this service, that progress must depend on the personal hygiene of the individual, on his home and its surroundings, his habits of life, his food and so on.

If this is so, we must depend on the slow process of education for permanently improving the "sanitary conscience" of the individual.

The results obtained from trying to teach adults have not been encouraging, nor is it found easy to get parents to change their personal habits as regards fresh air, cleanliness, food and drink, etc.

Some of these habits have been handed down from generation to generation, and are so ingrained as to be almost second nature, and it is almost a hopeless task to persuade parents of the present day that what was good enough for their grandfathers is *not* good enough for their children.

The immediate advantages of Medical Inspection are more or less recognised, but the ultimate advantages are either not recognised or are entirely ignored.

The immediate aim of Medical Inspection is treatment; the ultimate aim is prevention through the medium of education.

It is obvious, therefore, that the more successful the latter becomes, the less necessity will there be for the former.

Seeing, therefore, that we cannot rely on educating adults in the laws of health, if a general improvement is to be brought about, we must depend on educating the children, and the only way to educate the children is through School influences.

Of course, it will at once be said that the home is the natural and proper place in which the simple rules of healthy living should be taught, and where the child should learn to apply them, but knowing what many of the homes are, and how ignorant most parents are (and this refers to all classes of the community) of the laws of health, it seems to me that the process is a hopeless one.

For many years back children in our Elementary Schools have been receiving education in the benefits to their own health to be derived from the early treatment of the defects from which they suffer. Not only have they received education, but they have had practical demonstrations of the effects of treatment of themselves and their companions.

It is true that so far they have not received much Education in the methods of prevention, but that they are more and more realising the fact that early treatment of defects, however slight, is one of the surest methods of preventing illhealth and disease, cannot be doubted.

Further, I believe that in time they will come to realise that the great majority of even trivial defects from which they are now suffering can be prevented by attention to a few simple rules of health.

Careful observation of the habits of the population over many years has convinced me that the most important ways in which the laws of health are transgressed, are the following :—

1. *Want of cleanliness* of the person and clothing, of the home, of the food we eat, and of the air we breathe.
2. *Errors in diet* from earliest infancy onwards. In childhood in the excessive consumption of sweets, in irregularity of meals, and in excessive tea drinking.
3. *Insufficiency of rest and sleep*.—No School child should be out of bed after 8 o'clock at night.

With reference to the cost of Medical Inspection, in his Annual Report for 1921, entitled "The Health of the School Child," Sir George Newman, on page 23, says :—

"The first point with regard to this expenditure is obviously the question as to whether it is remunerative and economical, or whether it is wasteful and extravagant. In a general way it will be admitted that if the nation is getting good value in life, in health, and in capacity for work, the expenditure is an economical investment."

In this County the total expenditure on Elementary Education for the year ended March 31st, 1922, was £282,279.

The total amount spent on Medical Inspection and Treatment of School children was £8,238.

The cost of Medical Inspection and Treatment of Elementary School Children thus was less than 3% of the total expenditure, and, including Higher Education, is little over 2%, and I maintain, in spite of all criticism, that there is no extravagance, and that the ratepayers are receiving full value for the money expended, and not only that they receive full value, but that the money spent is an "Economical investment."

I.—STAFF.

The staff engaged in work in connection with the School Medical Service consists of :—

The School Medical Officer, who is also the Medical Officer of Health.

The Deputy School Medical Officer, who is also the Deputy Medical Officer of Health.

As in previous years, the County was divided for the purpose of School Medical Service into five Areas, with an Assistant Medical Officer in charge of each :—

No. 1 Area .. . . .	..	..	..	Dr. TOWERS.
No. 2 Area .. . . .	..	..	..	Dr. GIBSON.
No. 3 Area .. . . .	..	..	..	Dr. STIRLING.
No. 4 Area .. . . .	..	..	..	Dr. ADAM.
No. 5 Area (part-time)	..	..	..	Dr. MASON.
Dental Officer .. . . .	..	..	..	Mr. GILLIERON.

Early in the year Dr. Stirling obtained another appointment, and left on the 14th March. Owing to the necessity for economy his place was not filled, so that for $9\frac{1}{2}$ months the staff was one short. For the same reason Dr. Adam left at the end of the year.

During the year the staff of 10 whole-time Nurses was reduced to 7.

The time of these Nurses is divided between School Medical work, Health Visiting, and Tuberculosis work. The services of 65 District Nurses are utilised by arrangement with the Nursing Associations.

II.—CO-ORDINATION.

As the whole of the Staff, both Medical and Nursing, is engaged not only in School work, but also in all the other Health Services, co-ordination of the work is simple and complete.

- (a) Infant and Child Welfare work is carried out in the same Centres, and by the same Staff as the School Medical work (although I regret that this work has, owing to reduced staff, had to be limited), and as the County Council is the Authority for the administration of the Notification of Births Act for the whole County, with the exception of one Urban District, information regarding the Notification of Births is handed to the Attendance Department, so that Department has knowledge of how many Entrants should be expected each year. Through the courtesy of the Medical Officer of the Urban Area, noted as an exception, I receive information from him when the births notified in his Area reach the age of five, and this also is handed to the Attendance Department.
- (b) There are no Nursery Schools in the County.
- (c) Debilitated children under School age are sought for and looked after by the Nursing Staff, and any requiring medical treatment, who cannot attend at one of the Treatment Centres, and whose parents cannot afford to pay medical fees, are sent to a Medical Practitioner whose fees are paid by the County Council, a Scale of Fees having been arranged for this.

III.—THE SCHOOL MEDICAL SERVICE IN RELATION TO PUBLIC ELEMENTARY SCHOOLS.

Dr. Gibson, in reporting on the condition of the Schools in his Area, says :—

“ Concerning School Hygiene, I would again strongly urge that more attention should be paid to the cleaning of the School Buildings. Repeatedly one finds dirty windows, and heaps of dust over everything that is not in daily use. It is disheartening to find that even when this is pointed out, no improvement results. In most cases the caretaker's wage is small, and the School Manager finds it difficult to find a caretaker who will devote much time to this part of the work, but I feel that the children themselves should be encouraged to take a greater interest in the cleanliness of their Schools than they do at present. The system adopted at Wreay School might be copied at all the Schools to the great advantage of all concerned. Here a programme is made

out by the Headmaster at the beginning of each week, giving the names of the boys and girls who are to do duty each day of the week. The boys brush out the floors of the classrooms and cloakrooms, and sprinkle the floors with disinfectant ; the girls are responsible for the dusting. In this way the School building is kept clean and fresh, and incidentally the children are taught the necessity for cleanliness—a matter which is sadly neglected in many of the Schools. Show children how to keep the School clean, teach them the importance of doing so, let them feel the sense of comfort to be derived from perfectly clean surroundings, and the result will be improvement in their present homes, and probably perfection in their future homes.

In connection with School Hygiene, I have observed two other most commendable practices which I would like to see introduced into all the Schools. One of these was noted at Kirkandrews School. Here children from a distance keep stockings at the School, and on wet days they put these on when they arrive, so that their damp ones can be properly dried. The other practice was observed at Crosthwaite Girls' and Infants' School, where the children are instructed how to make slippers for use in the School. The quietness in the School which results from this, when compared with the constant rattle of clogs on the wooden floors is in itself enough to commend the practice, but it is specially from a health point of view that I would recommend it. Most children have to walk a fair distance to School, and even the best cared for frequently arrive with wet feet. We all know from experience that nothing is so likely to bring on a cold as sitting with wet feet, and whilst a cold is regarded by many as a trivial affair, frequent colds have serious consequences, and they should be prevented if at all possible. I am quite certain that many colds and other illnesses besides would be prevented if all the teachers were to follow the lead of the teachers at these two Schools, and see that no child is allowed to sit in the School with wet shoes or stockings.

Another matter which I would like to see taken up by the teachers is the provision of something hot during the winter months at the mid-day interval. The Schools in the Area are mostly rural, and many of the children have to walk two or even three miles to School. This means that they leave home about 8 a.m., and do not return till about 4-30 p.m. Under such circumstances children are not given a fair chance to keep in health and strength unless they have a meal at the middle of the day. Of course they all bring lunch of some sort with them to School, but usually this consists of bread and butter, or bread and jam, and very often the greater part of it is not eaten. A few children

also have milk or cold tea, but even for an adult, bread and cold tea makes a very poor meal, especially in winter. It is perhaps too much to hope for a canteen system, such as has been established at the Schools in Kent. The cost would not be very great—scarcely more than the sum now raised by many of the teachers by concerts, etc., to give the children an annual treat or excursion, and I am sure that the parents would welcome and assist with such a scheme. But at the very least arrangements should be made at all the Schools, so that every child unable to go home for dinner could have something hot. I find that at about a third of the Schools at present hot water is provided, and those who wish to do so make tea or cocoa. In some cases a teacher has charge of the arrangements, and in such cases I am informed that tea or cocoa can be provided at a very small cost. Take for example Raughton Head School. Here 56 of the 66 children on the Roll remain at School at the mid-day interval. Two large kettles of water are boiled every day, and tea or cocoa with milk and sugar are provided for all at a cost of 5d. per month per child. The Head Teacher assures me that since he started this practice the health of the children has improved, and that this has been reflected in the higher average attendance."

IV.—MEDICAL INSPECTION.

The arrangements made, and the methods adopted for the Medical Inspection of Children are fully dealt with in Appendix A. in my Annual Report for 1913, and have not been altered in any way.

(a) Age Groups of Children Inspected.

The age groups of children inspected are the same as in former years, viz.: (a) Code Groups (Entrants, Intermediates, and Leavers), and (b) Specials and re-examinations. Full particulars of the examinations carried out will be found in Table I at the end of this Report.

The following is a condensed summary :—

		<i>Boys.</i>	<i>Girls.</i>	<i>Totals.</i>
Entrants ..	..	1349	1322	2671
Intermediates ..	..	1163	1118	2281
Leavers ..	..	1233	1336	2569
		—	—	—
Code Groups ..	..	3745	3776	7521
Specials ..	..	2449	2578	5027
Re-examinations ..	..	612	684	1296
		—	—	—
		6806	7038	13844
		—	—	—

It will be noted that 12,548 individual children were examined and that 13,844 examinations were made, a decrease of 1,874 and 1,997 respectively on the figures of last year. This decrease is accounted for by the reduction of the Medical Staff, and by the fact that the arrangements for motor transport were not in operation during a sufficient part of the year to make an appreciable difference. For the same reason the number of re-visits of Schools is considerably less than in the previous year.

(b) The Board's Schedule has been strictly adhered to, with the exception that the children have not had their heights and weights taken. The reasons for this were given in my Annual Report for 1921.

(c) *Steps taken to secure the early ascertainment of crippling defects :—*

Teachers, Organisers of Physical Training, Attendance Officers, and the parents of children, are all asked to draw the attention of the Medical Officers to any child whom they have any reason to think is not normal, so that an examination may be made.

The "march past," which, as its name implies, is a march of all children in attendance past the Medical Officer after the Inspection, in order that he may pick out any child who does not look well. This is a most valuable procedure, and one which enables the Medical Officer to find many "Specials."

Now that the value of the Clinics is becoming better known, many children are taken there by their parents for examination, apart altogether from the Medical Inspection proper.

(d) Practically no disturbance of School arrangements takes place owing to the Inspection.

V.—FINDINGS OF MEDICAL INSPECTION.

A review of the facts disclosed by Medical Inspection is set out in Tables 2 and 5 at the end of this Report. In Table 2 is shown the number of defects found, and in Table 5 is shown the number of children found to be defective. The numbers, therefore, in the two Tables do not necessarily correspond.

The total number of children examined, whether as Routines (*i.e.*, Code Groups) or Specials, was 12,548 (1,874 less than last year). Of this number 7,023, or 55% (9% more than last year) were found to have some defect which required treatment or to be kept under observation,

I am afraid that the long period of unemployment is at last telling its tale on the children, whereas the percentage of children with some defect either requiring treatment or to be kept under observation in the Eastern part of the County, where unemployment has not been so bad, was 50% ; in the West of the County, where most distress existed, the percentage was 68.

(a) *Uncleanliness.*

Of the Code Groups examined, only 2.5% showed uncleanliness of the head or body compared with 3% the previous year.

Of the Specials examined, 5% showed uncleanliness of the head or body, compared with 8% the previous year.

When it is remembered that in the early years of Medical Inspection it was nothing unusual to find in a School 30, 40, or even sometimes 50% of the children dirty and verminous, the result, as shown above, is one of the outstanding features of Medical Inspection, and one which the Teachers and Nurses particularly are to be congratulated on for it is mainly owing to their efforts that such good results have been obtained. The worst cases are practically now never seen, but the difficulty which we now have to face is that the cases which do exist are those in which a re-infection occurs from the home. It is practically impossible to keep some of the children free from vermin, because as soon as they are cleaned they become infected again in their homes, and I believe the cause of this re-infection is that the flock beds so commonly used get in a short time swarming with vermin, and it is impossible to get rid of them, as the flock forms an excellent breeding ground for vermin.

If straw was used instead of flock, it could be changed often, and would be cheaper and much cleaner than the flock.

(b) *Minor Ailments.*

Included in this group are various external eye, skin, and ear diseases. Such trivial and common ailments of children as small septic sores, cuts, burns, etc., are also included. Of these 1,864 were referred for treatment, 418 more than in the previous year.

An increase of cases does not necessarily mean an increase in the condition. It may be that very trivial cases are sent for treatment, or it may be that more cases are brought to the notice of the Medical Officer. It is certainly true that parents are more anxious to have their children treated.

(c) *Tonsils and Adenoids.*

Of the total number of children examined, whether as Routines or Specials, 489, or 3.9%, were referred for treatment ; whilst 1,168, or 9.3%, were to be kept under observation.

(d) *Tuberculosis.*

33 cases of definite Pulmonary Tuberculosis were found, 8 in Routines and 25 in Specials. 29 of these were referred for treatment, and 4 to be kept under observation. The same condition was suspected in 162 cases, 58 Routines and 104 Specials. Of these 142 were referred for treatment, and 20 to be kept under observation.

39 cases of Tuberculosis affecting Glands, Bones, Joints, Skin, &c., were found, 25 were referred for treatment, and 14 to be kept under observation.

(e) *Skin Diseases.*

These diseases were very prevalent during the year. There were 167 cases of Ringworm (111 of the head and 56 of the body) 88 of Scabies, 569 of Impetigo, as well as 240 of other non-tubercular skin diseases. Scabies was not nearly so prevalent, but the other diseases were much more so than in the past year.

(f) *External Eye Diseases.*

The most common of these diseases is Blepharitis—"sore eyes"—of which there were 214 cases.

(g) *Defective Vision.*

1,083 cases of defective vision were noted, 655 for treatment, and 428 to be kept under observation. In addition to these there were 296 cases of Squint, in which, of course, in the large majority of cases there is a serious defect of vision.

(h) *Ear Disease and Hearing.*

91 cases of defective hearing were noted, 66 were referred for treatment, and 25 to be kept under observation. Of Ear Diseases 136 were noted, 34 Routines and 102 Specials.

(i) *Dental Defects.*

The cases noted in Table 2 are only cases in which there was practically not a sound tooth in the head, or in which the mouth was in such a septic condition as to seriously interfere with the child's health, and to make immediate treatment necessary. Of these cases there were 350.

The Report of the School Dental Officer is given later in this Report (see Appendix B.).

(j) *Crippling Defects.*

Under this heading are included Rickets, Congenital Deformities, Spinal Curvatures, the after-effects of Poliomyelitis and other deformities. 225 cases were noted, 133 were referred for treatment, and 92 to be kept under observation.

VI.—INFECTIOUS DISEASES.

Information regarding Infectious Diseases (whether notifiable or not) reaches the School Medical Officer through Nurses, Head Teachers, School Attendance Officers, as well as through the Local Medical Officers of Health. Head Teachers and Attendance Officers notify both the School Medical Officer and the district Medical Officer of Health of any Infectious or suspected Infectious Disease that may come to their notice.

Any information coming otherwise to the notice of the School Medical Officer is at once communicated to the Medical Officer of Health. The closure of, and exclusion of children from School are dealt with in Article 45 (b) of the Code. The Medical Officer, on becoming aware of a case of Infectious Disease, excludes the scholar, and notifies the School Medical Officer. In the same way, if the Medical Officer of Health considers that closure of a School is desirable, he can, if the matter is urgent, close the School, and subsequently obtain the approval of the School Medical Officer. Forms of Certificates for the purpose are provided. This method is found so simple and convenient that closure under Article 57 of the Code has never been resorted to. With the exception of the epidemic of Influenza in the first two months of the year, the County was practically free from Infectious Disease until October, when Measles started in one of the Schools in the Penrith Rural Area. I believe the outbreak originated in the Secondary School, Penrith, and was spread from there to many of the surrounding villages.

At the time of writing this Report, many Schools have had to be closed all over the County on account of the wide-spread epidemic.

The extraordinary carelessness of parents when any Infectious Disease is about is the main cause of their spreading so rapidly, especially is this so as regards Measles; most parents quite wrongly considering an attack of Measles a matter of slight importance to the children, whereas, as a matter of fact, more children die from Measles than from all the other Infectious Diseases put together.

VII.—FOLLOWING UP.

The methods of following-up employed are given in detail in my Annual Report for 1920, pages 13—15. The importance of following up cannot be over-estimated, because so many parents take no notice of a printed or typed form, but most of them are amenable to reason when the results of neglect are pointed out to them, either by a Medical Officer or by one of the Nurses. Hence the great advantage of having as many re-visits as possible.

A summary of the following up work done by the Nurses is given below :—

<i>Condition.</i>	<i>No. of Cases.</i>	<i>No. of Visits paid</i>
Malnutrition	25	56
Uncleanliness	413	1258
Skin Diseases	415	1178
Eye { New Cases } ..	371	879
Conditions { Old Cases } ..	369	369
Ear Conditions	63	170
Nose and Throat	237	564
Heart and Circulation ..	88	194
Lungs (Non-Tubercular) ..	74	194
Lungs (Tubercular) ..	25	74
Pretubercular	56	145
Other Tubercular Conditions ..	19	45
Nervous Conditions	2	2
Deformities	28	52
Glands	14	27
General Cases	83	216
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Total	2282	5423
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In addition to these 667 visits were paid by District Nurses to 266 cases requiring dental treatment.

VIII.—MEDICAL TREATMENT.

The methods employed, or available, for the treatment of defects, are as follows :—7 School Clinics have been opened during the year. Special arrangements are also made for the treatment of :—

- (1) Tonsils and Adenoids.
- (2) Eye Diseases.
- (3) Ear, Nose and Throat Diseases.
- (4) Dental Defects.
- (5) Crippling.
- (6) Tuberculosis.

The question has been asked :—Have School Clinics justified the expense in establishing and maintaining them ?

I think that the following figures, which show the number of cases and the number of attendances at the various Clinics during the year, is sufficient answer :—

<i>Clinic.</i>	<i>New Cases.</i>	<i>Visits.</i>
Cleator Moor	334	1133
Cockermouth	279	1571
Keswick	52	179
Maryport	471	2242
Millom	221	826
Penrith	166	815
Wigton	583	1830
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Totals	2106	8596
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The following is a summary of the work done at the Clinics during the year :—

<i>Condition for which Child attended the Clinic.</i>	<i>New Cases.</i>	<i>No. of Visits.</i>
Malnutrition	15 ..	96
Uncleanliness	76 ..	210
Skin Diseases	810 ..	3692
Eye Diseases	182 ..	957
Ear Diseases	108 ..	678
Nose and Throat	105 ..	288
Enlarged Glands (Non-Tubercular) ..	20 ..	99
Heart and Circulation ..	61 ..	252
Lungs (Non-Tubercular) ..	90 ..	325
Lungs (Tubercular or Suspected)	95 ..	588
Tuberculosis (Non-Pulmonary)	30 ..	78
Nervous System	12 ..	23
Deformities	27 ..	85
Minor Injuries	186 ..	604
Brought for Examination only	98 ..	98
Other Defects and Diseases ..	191 ..	523
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Totals	2106 ..	8596

The seven Clinics now open serve a large part of the County, but still only some of the more populous Areas leaving many more or less populous Areas unprovided for. As the above figures show, the Clinics serve a very useful purpose, and have become very popular, and as time goes on, and they become better known are getting more so. Not only has it been impossible to increase the number of Clinics, but towards the end of the year, as the attendances at Keswick Clinic were comparatively small, and the Medical Staff at the beginning of the year was to be further reduced by one, it was decided to close this Clinic.

When it is remembered that a large percentage of the cases that come to and are treated at the Clinics would, without such treatment centres, go untreated, their utility will be better realised. I refer to such cases as Ringworm, Scabies, Impetigo, Blepharitis, "Running Ears," minor injuries, and so on, but in addition the Clinics have other useful functions :—

- (a) They serve as Centres to which the Attendance Officers can send all ailing children if not for treatment, then for an opinion as to whether the child is fit to attend School or not.
- (b) Often at the Medical Inspection in Schools it is impossible, owing to the noise, or that special apparatus is required, to make as complete an examination as desired and necessary, such cases are referred to the Clinics.

- (c) Cases such as, for example, Running Ears, which, however willing the parents are to carry out instructions, cannot be attended to satisfactorily at home, are treated by the Nurses under the supervision of the Medical Officer.
- (d) A large number of the cases attending the Clinics are able and do attend School, whilst even if they received treatment at home, would, in all probability, remain away from School, whilst, when they are attending School, the Head Teacher can see that they attend the Clinic regularly.

There still remains a certain proportion of parents who cannot or will not realise the importance of early treatment of all, even minor, ailments. With these parents it is exceedingly difficult to deal, but every effort is made to bring them to reason, but even so there are some who will not do anything unless great pressure is brought to bear. Of course, the easiest method would be to say : " very well, if you will not attend to your own child there the matter rests," but it is the child who is to suffer and not the parent, and in some cases not the child alone, but his or her school-fellows as well.

If, after all efforts such as writing to the parents, sending a Nurse to explain the importance of treatment, pressure by the Teachers and the Attendance Officers fail, as a last resort the case is reported to the N.S.P.C.C., and, if necessary prosecution is undertaken by them for neglect under the Children Act, but as a general rule the case is satisfactorily dealt with without going to Court.

(a) Minor Ailments.

The treatment of minor ailments is carried out at the Clinics or by the Nurses at the children's own homes where a Clinic is not available.

Of the 1864 minor ailments referred for treatment, 1,619 were dealt with in this way, 117 were treated otherwise ; a total of 1,736 minor ailments satisfactorily treated during the year.

(b) Tonsils and Adenoids.

When it is realised that of the total number of children inspected, 13% had some affection of the nose and throat, which either required treatment or to be kept under observation, and that 4% required treatment, it will be obvious that the condition is a serious one demanding attention. When there is any affection of the nose and throat, however slight, the after effects may be so serious on the health of the child that no steps ought to be neglected, to, in the first place, prevent mild cases becoming worse and in the second, to cure those cases which are already giving rise to more serious symptoms. The causes of enlarged Tonsils and Adenoid growths are many and varied, of which the most important are ;—

- (a) Faulty environment, including bad housing, impure water supplies, and insanitary conditions in general.
- (b) Improper diet leading to indigestion in all its phases.
- (c) Poisoning in one form or another.

It may be from bad teeth and septic conditions of the mouth, or from the inhalation of various infecting organisms through the mouth. Enlargement of the Tonsils and Adenoid growth, besides causing deafness, produces one or more of the following far-reaching and serious defects :—

- (a) Repeated earache, with inflammation of the middle ear which in some cases leads to inflammation of the brain and death.
- (b) Mouth breathing, whereby the air breathed is not warmed moistened or filtered as it is if passed through the nose. As a result mouth breathers are more liable to all kinds of infection, such as colds, bronchitis, pneumonia, scarlet fever, diphtheria, measles and tuberculosis.
- (c) Malformation of the jaws, and consequently irregularity of the teeth.
- (d) Deformity of the chest.
- (e) "Night Terrors," due to snoring, and the persistent efforts to breathe through the nose causing an insufficient supply of oxygen, and so waking the child up.

It will thus be seen that School Medical Officers have no light task in selecting cases which, firstly, ought to be kept under observation, and, secondly, those in which some form of treatment is required but the most difficult point is in coming to a decision as to what form of treatment should be recommended. In slight cases he is satisfied with recommending that the child should be treated on general hygienic lines, good food, fresh air in abundance especially at night, and that any likely source of infection such as decayed teeth and sores about the nose should be remedied, and that suitable breathing exercises should be taught. In other cases he has to decide whether an operation should be recommended or not.

Operative interference is only justified when the School Medical Inspector has satisfied himself that the condition is due to some removable cause or that it is causing or likely to cause injury to health.

Recognising all this as well as the seriousness of the operation operative treatment is only advised in urgent cases and for the reason that no facilities are provided for after-care no operations are allowed at the Clinics, therefore arrangements have been made with all the Infirmarys and Cottage Hospitals in the County (except Cockermouth and Keswick), for the operations to take place at these Institutions.

During the year 92 children received operative and 65 some other form of treatment.

(c) *Tuberculosis.*

29 cases of Pulmonary Tuberculosis were found amongst the children inspected (8 in Routines and 21 in Specials).

At the beginning of the year 21 children were in the Sanatorium, 13 entered and were discharged from the Sanatorium during the year, and 9 were under treatment in the Sanatorium at the end of the year. In addition to these definite cases of Tuberculosis there were 162 suspected cases (58 in Routines and 104 in Specials), 142 were referred for treatment at the Dispensaries, and 20 to be kept under observation. 39 cases of Non-Pulmonary Tuberculosis were also found.

In Table 2 will be found a record of defects found in the course of Medical Inspection. It will be noted that these defects are definitely divided into two groups :—

- (1) those referred for treatment, and
- (2) those requiring to be kept under observation, but not referred for treatment.

In other words they are classified as

- (1) suffering from the various defects enumerated, and
- (2) showing premonitory signs or symptoms of the defects enumerated, which if not treated promptly will certainly in a proportion of cases progress sooner or later to class 1.

To my mind a better classification would be :—

- (1) those requiring treatment to *cure* a defect, and
- (2) those requiring treatment to *prevent* a defect.

It must, however, be noted that at the present time in class 2 are certain cases which have definite defects gone too far to be cured; these, however, are noted to be kept under observation in order to prevent, if possible, any further mischief occurring.

In Table 2 will be found a large number of defects, such as those of the nose and throat, heart and circulation, lungs (Bronchitis, etc.), as well as 162 suspected to be Tuberculosis. All these children are below par. Their vitality is diminished; their resistance is at a low ebb; in short, they are at a turning point in their lives at which either foundations of good health and successful careers, or of chronic illhealth or permanent disease may easily be laid.

After an epidemic of, for instance, Measles, such as is raging at the present time, there are hundreds of children who are in this condition and who require treatment.

Many of them are recommended for treatment, but what does the treatment they are recommended amount to? Good food, which many of them are unable to procure, an abundance of fresh air and sunlight, from which many of them are debarred by the conditions under which they live. All that is left then to do is to recommend Cod Liver Oil, Malt, and Oil, or some tonic medicine, and to hope for the best.

What they really require is from a month to three months treatment under the best hygienic conditions, including good food, fresh air, definite play hours, and definite hours for rest and sleep, which conditions can only be carried out in the vast majority of cases with which we have to deal in a residential Institution.

At the present time no such Institution is available in the County, although efforts have been made to come to an arrangement with the Committee of Management of the Silloth Convalescent Home. Although the Committee of Management is most anxious to take our cases, negotiations have fallen through, owing to circumstances into which it is here unnecessary to go.

The County Council has on its hands at the present time an Institution of which no use is being made, and which would, I believe, serve the purpose admirably. I refer to the Cockermouth Industrial School.

This School could, I believe, at not an excessive cost, be converted into such an Institution as is urgently required in this County.

To it would be sent all children in our Elementary Schools who were malnourished from any cause, who were below par, the pre-tuberculous, as well as many children who failed to pick up satisfactorily after any illness. In addition, such accommodation would provide for the 559 "dull and backward" children referred to in the last line of Table 3. In such an Institution an open-air School would be provided, so that the children's education could be carried on at the same time as their bodily condition was being improved. I believe that such an Institution would more than compensate for the money spent on it, in the present, in improved health, and, in the future, in the prevention of much disease, more particularly Tuberculosis. At the present time vast sums of money are spent annually on the cure of Tuberculosis, but no steps such as are suggested here are taken to prevent it.

Whatever part of this Report may be skimmed over lightly and receive no further attention, such importance do I attach to this matter that I venture to hope that every Member of the Education Committee will read carefully what has been said, and will give it careful consideration and serious attention.

(d) *Skin Diseases.*

Of these conditions, 1,024 were referred for treatment, 969 of which received treatment by the Medical Officers or the Nurses either at the Clinics or at the homes of the children, and 55 received treatment otherwise.

(e) *External Eye Diseases.*

Much the most common and troublesome of these diseases is Blepharitis, which is an eczematous condition of the margins of the eyelids, due in the great majority of cases to dirt and neglect, and frequently found associated with dirty, verminous and sore heads, the septic matter from which is transferred to the eyelids after scratching the head. 298 of these cases were referred for treatment—145 were treated at the Clinics; the remainder were treated by the Nurses at the homes of the children.

(f) *Vision.*

Of the 655 children found with Defective Vision, in only a small number (189) were glasses prescribed.

The arrangement for the employment of Practitioners with special experience in eye work was sanctioned by the Board towards the end of the year, and has been put into operation, so that in the future there should be no difficulty in getting all cases attended to. The same arrangements as formerly still hold as regards Dr. Ross. During the year he saw and prescribed treatment for 120 Elementary School children.

Before making arrangements with Dr. Ross to see any case, enquiry is made into the amount, if any, the parents can afford to pay. A form is sent to each parent enquiring whether they are able to pay :—

- (1) Railway Fare,
- (2) Cost of eye glasses or other necessary treatment, and
- (3) Specialist's fee.

Of the 120 cases seen :—

- 20 were unable to pay anything,
- 21 paid (1) only,
- 21 paid (1) and (2),
- 1 paid (1) and part of (2),
- 1 paid (2) only,
- 1 paid (3) only,
- 2 paid (1) and (3),
- 4 paid (1) and (2), and part of (3),
- 1 paid (1) and part of (3),
- 2 were seen at the Infirmary, and
- 46 paid everything.

(g) *Ear Disease and Hearing.*

157 cases were treated during the year, 15 cases were referred to Dr. Syme for his advice, and 5 were admitted to and operated on in a Nursing Home by Dr. Syme.

(h) *Dental Defects.*

At the Routine Inspection only the extreme cases are noted, and the parents are advised to obtain treatment. Of the 350 cases so noted, 91 received treatment by Practitioners.

The Report by the School Dental Officer is given later in this Report (Appendix B.).

In Table 4 (*d*) will be found a record of the year's work by Mr. Gillieron, the School Dental Officer.

Up to the present dental treatment has only been possible at Centres where there is a Clinic established. The time is rapidly approaching when treatment will have to be undertaken in parts of the County in which there is no Clinic or other suitable premises available, and the only satisfactory method of dealing with such Areas is, I think, a motor van fitted up as a Dental Clinic, such as was used during the War.

This, I think, is an important matter, which should be taken into consideration at an early date, in order that there may be no delay.

(i) *Crippling Defects and Orthopaedics.*

In Appendix A. will be found a valuable report on the cripple problem, written by Dr. Kenneth Fraser. One of the few beneficial effects of the War is the remarkable progress that has been made in orthopaedic surgery.

As an outcome of this the cripple problem in Cumberland was tackled, and, in spite of difficulties which at first appeared to be insurmountable, such progress has been made and results (such as are depicted in the photographs in the Report) obtained as to justify a much greater expenditure than has been incurred by the Education Authority.

The Cripples of this County are under a deep debt of gratitude to Dr. Fraser for his efforts, and the work he has put in on their behalf.

IX.—OPEN-AIR EDUCATION.

Beyond the fact that some Teachers hold classes in the playgrounds in suitable weather, nothing is done in this direction.

X.—PHYSICAL TRAINING.

The work of Physical Training in the Schools has made considerable progress under Miss Frazer and Mr. Gray, the Chief Organisers, in spite of the unfortunate changes in, and reduction of, staff.

Teachers, too, are keenly interested in the work, and appear to recognise the importance of it, both from an educational and from a health point of view.

One has only to see some of the demonstrations that have been given to realise not only that the children thoroughly enjoy their exercises, but also to recognise the lasting effects which such training must have on children in the way of inculcating obedience, discipline, self-reliance, and alertness.

It is much regretted that at the end of the year all remedial work had to be given up owing to reductions in the staff.

This is more to be regretted, as we had under treatment several cases which, had remedial exercises been carried out, would, in all probability, have been prevented from reaching the stage of deformity, which would necessitate surgical intervention, but which will, without any remedial treatment, inevitably have to be operated on later.

XI.—PROVISION OF MEALS.

Owing to the large amount of unemployment, and the consequent distress, meals have been provided at ten Centres in the West of the County. The average number of children supplied weekly varied from 405 to 1,797, and altogether 465,268 meals have been supplied at an average cost of 2d. per meal.

XII.—SCHOOL BATHS.

None have been provided, either at Schools or at the Clinics.

XIII.—CO-OPERATION OF PARENTS.

A notice inviting parents to be present is sent out by the Head Teacher, and many parents accept the invitation. The number of parents present, however, varies considerably in the different districts.

XIV. & XV.—CO-OPERATION OF TEACHERS AND ATTENDANCE OFFICERS.

The help so readily given by both is much appreciated by the Medical Staff.

XVI.—CO-OPERATION OF VOLUNTARY BODIES.

The help which we have had from the National Society for the Prevention of Cruelty to Children has again been invaluable.

All cases of apparent neglect are reported to the Society, and one of the Inspectors visits the home. Cases are most tactfully dealt with, and no prosecution is undertaken unless everything else fails.

XVII.—BLIND, DEAF, DEFECTIVE, AND EPILEPTIC CHILDREN.

During the year 1922, 18 deaf and dumb children, and 4 blind children, were in Institutions at the charge of the Education Authority.

XVIII.—NURSERY SCHOOLS.

None are provided in this Area.

XIX.—SECONDARY SCHOOLS.

Dr. Kenneth Fraser, in reporting on the Secondary Schools in his Area, says :—

" With regard to treatment of defects found among the new cases examined for the first time during 1922, it will be observed that practically no records of treatment are given. The reason is that owing to the fact that practically all the new cases enter these Schools in the Autumn Session, and it is not possible to arrange for the Medical Examination of the new pupils to take place until nearly the end of October, and re-examinations before the Schools break up for the Christmas holidays are of little value, because it only allows about six weeks for treatment to be obtained.

At the end of 1921, an attempt was made to obtain the results of treatment obtained from the Schools, lists of children with defects being forwarded to the Headmasters and Headmistresses. The replies received were compared with the notes made during the 1922 visit, and the returns were found to be unreliable. This method has, therefore, been discontinued, and, for the future, it is proposed to obtain the results of treatment on defects found in any given year in the following year.

The few cases which are noted as treated are mostly such minor conditions as Impetigo and Blepharitis.

It will be seen that the results of treatment on defects referred from 1921 continue at the same satisfactory level as in previous years."

Dr. Towers, reporting on the Secondary Schools in his Area, says :—

" Each of the Schools was visited and revisited.

The same procedure was adopted during the past year as in the previous year, *i.e.*, at each inspection two distinct groups were examined :—

1. Entrants to the School since the previous visit.
2. All children suffering from defects at the time of the last inspection.

The number of new cases examined at Penrith Grammar School is comparatively small, due to the fact that an epidemic of measles was in progress at the time of the re-visit, and a certain number of pupils were, therefore, absent who would otherwise have been examined as new cases. It has been impossible to pay a third visit to these Schools, and, therefore, nothing can be stated as regards defects referred for treatment at the last visit. These defects have had to be entered under the heading "Entirely Untreated," whereas in all probability some of these defects have actually been remedied.

Undoubtedly the outstanding feature has been the amount of dental work that has been done. At Brampton, for instance, 38 cases of dental defects were referred for treatment at the visit; of these 32 were found to be perfect at the re-visit. Of the remaining six cases, 1 had left School, 1 (girl) refused the treatment advised by the Dental Officer (as this involved extraction of all the front teeth), and 4 were untreated. Of these 4, 2 were unable to accept the treatment offered, owing to very extreme financial stringency. At Penrith, the results must also be considered satisfactory 36 out of 49 being completely treated, and 5 partially treated."

TABLE. I.

A general statement of the numbers examined, of the defects found, and of treatment obtained :—

	<i>Referred from 1921.</i>	<i>1922. New Cases</i>
Number of children examined ..	.. 496	399
Number of re-examinations ..	.. 413	102
Children with no defects ..	..	143
Number of children with defects referred for treatment ..	.. 495	209
Left or absent at the re-visit ..	.. 66	12
Children with all defects remedied ..	.. 358	43
Children with some defects remedied or treated ..	.. 76	20
Promised to obtain treatment ..	.. 28	79
Entirely treated ..	.. 76	33
Refused ..	.. 3	—
Total number of defects referred for treat- ment ..	.. 672	251
Total number of defects treated or partially treated ..	.. 497	73

TABLE II.

Referred
for
Treatment
Referral
for Ob-
serva-
tion.

Left or
absent at
re-visit.

	From	New																						
	1921.	1922	1921.	1922	1921.	1922	1921.	1922	1921.	1922	1921.	1922	1921.	1922										
Defective Teeth	423	150	—	..	3	258	..	27	39	..	14	31	..	65	2	..	—	57	..	25	36	..	4	
Very Defective Teeth	34	25	—	..	—	—	..	9	..	—	7	..	1	..	6	..	—	14	..	6	4	..	3	
Cleanliness	1	—	—	..	—	—	..	—	—	..	1	..	—	—	—	—	..	—	—	—	..	—	—	
Malnutrition	1	..	2	—	..	1	..	1	..	—	—	..	—	2	—	—
Pulmonary Tuberculosis	—	—	—	..	—	—	..	—	—	..	—	—	—	—	—	—	..	—	—	—	..	—	—	
Pre-tubercular	1	..	—	—	2	..	—	—	1	..	1	..	—	—	—	—	..	—	—	—	..	—	—	
Bronchitis and Weak Chest	6	..	2	22	..	24	6	..	6	..	1	..	—	—	—	—	..	—	—	—	..	—	—	
Organic Heart Disease	8	..	4	3	..	2	6	..	4	..	1	..	—	—	—	—	..	—	—	—	..	—	—	
Functional Heart Disease	22	..	3	30	..	14	21	..	1	..	—	—	—	—	2	..	..	—	—	..	—	—	—
Anæmia	13	..	6	2	..	1	12	..	1	..	—	—	—	—	3	..	..	—	—	..	—	—	—
Defective Vision	42	..	20	11	..	10	30	..	6	4	..	—	1	..	8	..	..	—	—	..	—	—	—
External Eye Disease	13	..	3	1	..	—	—	11	..	1	2	..	—	—	—	—	..	—	—	—	..	—	—	
Otorrhœa	8	..	1	1	..	—	—	7	..	—	1	..	—	—	1	..	..	—	—	..	—	—	—
Defective Hearing	7	..	3	—	..	3	5	..	1	..	—	—	—	—	1	..	..	—	—	..	—	—	—
Tonsils	9	..	3	7	..	14	4	..	—	1	..	—	—	2	..	..	—	—	..	—	—	—	—
Adenoids	2	..	4	—	..	—	—	—	—	..	—	—	—	—	—	—	..	—	—	—	..	—	—	
Tonsils and Adenoids	2	..	2	1	..	—	—	1	..	—	—	—	—	—	—	—	..	—	—	—	..	—	—	
Nasal Obstruction	2	..	—	—	—	—	—	—	—	..	2	..	—	—	—	—	..	—	—	—	..	—	—	
Non-Pulmonary Tuberculosis	62	..	5	4	..	3	50	..	5	3	..	1	..	1	..	3	..	—	—	..	—	—	—	
Spinal and Other Deformities	—	..	—	—	—	—	—	—	—	..	—	—	—	—	—	—	..	—	—	—	..	—	—	
Nervous Diseases	—	..	2	3	..	—	—	—	—	..	2	..	3	..	—	—	..	—	—	—	..	—	—	
Impetigo	—	..	—	—	—	—	—	—	—	..	—	—	—	—	—	—	..	—	—	—	..	—	—	
Scabies	—	..	—	—	—	—	—	—	—	..	—	—	—	—	—	—	..	—	—	—	..	—	—	
Other Defects	11	..	3	17	..	7	11	..	3	—	..	—	—	—	—	—	..	—	—	—	..	—	—	
	671	..	240	102	..	83	437	..	57	59	..	16	34	..	95	3	..	—	87	..	44	63	..	12

XX.—CONTINUATION SCHOOLS.

There are no Continuation Schools in the Area.

XXI.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

A separate Report on this work is published by the Special Committee dealing with this.

XXII.—SPECIAL INQUIRIES.

Dr. Gibson in his Area made a special enquiry into the condition of the children classified as dull and backward, and reports as follows :—

" Of the 4,470 individual children inspected, it will be seen that 2,290, or roughly half, were found to have defects which required treatment or to be kept under observation. As in former years, I have included in this number those who were classed as dull or backward, but having made an analysis of these cases, I realise that there are included a number of children who must be regarded as normal in every respect. The classification of "retarded 2 years," or "retarded 3 years," has been made strictly as directed, according to age and standard, but, although backward in this sense, some of these children are undoubtedly of normal intelligence. It is only by making use of some such standard as the Terman or Binet-Simon tests that a true estimate of intelligence can be obtained, and as it would be impossible to carry out these tests properly in the time available, I have not attempted to do so. However, a teacher who has a child under observation day after day, and week after week, gains a fairly accurate estimate of that child's intelligence, and below I have given a summary of the reasons given by the teachers on request to account for the backwardness in the cases reported :—

	Backward 2 years.	Backward 3 years.
Bad attendance through ill-health, Diseases mentioned :—		
Rheumatism, Chorea	34	7
Infantile Paralysis .. ..	..	4
Phthisis, Epilepsy	9	2
Bad attendance, no reason given	16	15
Late of coming to School	11	
Frequent changes of School	86	1
Unsatisfactory home conditions	4	1
Defective hearing	6	1
Defective Vision	4	
Adenoids	1	
Laziness	1	
Slow in development (improving) ..	6	
Hereditary	15	7
Various reasons, such as Dull Intellect, Weak Memory, Lack of concentration, etc.	67	15
No reason known	35	41
Hydrocephalic	—	18
Total	159	56

From the above it will be seen that of the 159 two years backward children, the reasons given to account for the backwardness in 86, or more than half, are quite sufficient to explain the backwardness without having to assume that the children concerned are in any way lacking in intelligence. And for roughly one quarter of the three years backward children similar explanations are given. As one would expect, the proportion explained in this way is much smaller among the three years backward than among the two years backward, for, although bad attendance, poor home conditions, frequent changes of School, etc., may easily throw a child two years behind, there is more likely to be some mental dulness when a child is found to be three years backward. Defective Vision, Deafness, and the presence of Adenoids, were believed, and I thought rightly so, to account for the backwardness in 12 of the children. The cases of defective vision were children with marked myopia, who had been in some cases excluded for long periods, and in others forbidden by the Eye Specialist to do any near work. The 7 cases of defective hearing were seen by the Ear Specialist. Two were on the borderland of being deaf and dumb, and one, who was stone deaf as a result of Cerebro-Spinal Meningitis, was sent to a special School. In the "Adenoids" case, the parents had refused to get anything done for some years, but they consented in the end, and had the operation performed during the past year.

NXIII.—EXAMINATION OF PUPIL TEACHERS, BURSARS AND SUPPLEMENTARY TEACHERS.

<i>New Cases.</i>	<i>1922.</i>				
No. examined	104				
No. without defects	64				
No. with defects :—					
Defective teeth	23				
Eyes	11				
Other defects	12				
Of the above :—					
No. re-examined	Nil.				
Defects remedied	Nil.				
Defects still unremedied	—				
<i>Cases referred from 1921 :—</i>					
No. of cases	24				
No. re-examined	24				
No. found fit on re-examination	20				
No. with defects still unremedied	4				

I have the honour to be,

Yours obediently,

CARLISLE,
March, 1923.

F. H. MORISON.

County of Cumberland.

XXIV.—STATISTICAL TABLES

For the Year 1922.

Table I.—Number of Children inspected.

Table II.—Return of Defects found.

Table III.—Numerical Return of all exceptional Children.

Table IV.—Treatment of Defects of Children.

Table V.—Summary of the Defects of Children.

Table VI.—Summary relating to Children Medically inspected at the Routine Inspections during the Year 1922.

APPENDIX A.
COUNTY OF CUMBERLAND.

TABLE I.

NUMBER OF CHILDREN INSPECTED—JANUARY 1ST, 1922, TO DECEMBER 31ST, 1922.

A.—ROUTINE MEDICAL INSPECTION.*

Age.	ENTRANTS.						INTERMEDIATE GROUP.	LEAVERS.					Grand Totals.
	3	4	5	6	Other Ages.	Total.		8	12	13	14	Other Ages.	Total.
Boys ..	64	310	671	304	—	1349	1163	974	250	9	—	1233	3745
Girls ..	41	311	679	291	—	1322	1118	1008	315	13	—	1336	3776
Totals ..	105	621	1350	595	—	2671	2281	1982	565	22	—	2569	7521

B.—SPECIAL INSPECTIONS.

	Special Cases.†	Re-examina- tion (i.e., No. of Children Re-examined)
Boys ..	2449	612
Girls ..	2578	684
Totals ..	5027	1298

C.—TOTAL NUMBER OF INDIVIDUAL CHILDREN
INSPECTED BY THE MEDICAL OFFICER,
WHETHER AS ROUTINE OR SPECIAL CASES
(no Child being counted more than once
in one year).

Number of individual Children inspected	12548
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*ROUTINE MEDICAL INSPECTION is Medical Inspection carried out on the lines of the approved Schedule at the time when Routine Medical Inspection is due and made on the school premises, or other places sanctioned by the Board of Education under the Code.

†“SPECIAL CASES” are those specifically referred to the Medical Officer, and not due for Routine Medical Inspection under the Code at the time when specially referred. Such children may or may not be of Code-group age, and may be referred to the Medical Officer at the school or the Clinic by the Committee, Medical Officers, School Nurses, Teachers, Attendance Officers, Parents or otherwise.

COUNTY OF CUMBERLAND.

TABLE II.—RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION IN 1922.

This Table is intended, except as regards the final line, to be a record of defects, and not of individual children who are defective. For the sake of convenience, cases of Squint should not be recorded also under the heading of "Defective Vision," and cases of Defect of Nose and Throat should be included in one only of the sub-headings. As regards "Teeth," particulars should be given in the statements of the working of schemes of (1) dental inspection, (2) findings including oral sepsis, and (3) treatment where a scheme is in operation. (See also Table 4 D.).

DEFECT OR DISEASE.	ROUTINE INSPECTIONS.			SPECIALS.		
	(1)	(2)	(3)	No. requiring to be kept under obser- vation, but not referred for treat- ment	No. referred for treat- ment.	No. requiring to be kept under obser- vation but not referred for treat- ment.
				(4)	(5)	
Malnutrition ..	..	25	..	2	..	36
Uncleanliness—						2
Head ..	..	162	..	—	..	224
Body ..	..	29	..	1	..	29
Skin ..	{	Ringworm, Head ..	20	..	—	91
		Do. Body ..	4	..	—	52
		Seabies ..	44	..	—	44
		Impetigo ..	102	1	—	465
		Other Diseases (Non-tubercular) ..	22	..	20	184
						14
Eye ..		Blepharitis ..	73	..	1	140
		Conjunctivitis ..	11	..	—	32
		Keratitis ..	1	..	—	4
		Corneal Ulcer ..	3	..	1	2
		Corneal Opacities ..	1	..	5	7
		Defective Vision ..	326	..	221	329
		Squint ..	58	..	73	82
Ear ..	{	Other Conditions ..	6	..	7	18
		Defective Hearing ..	24	..	7	42
		Otitis Media ..	28	..	1	71
		Other Ear Diseases ..	5	..	—	26
Nose & Throat ..	{	Enlarged Tonsils ..	86	..	487	179
		Adenoids ..	26	..	35	33
		Enlarged Tonsils and Adenoids ..	86	..	97	79
		Other Conditions ..	11	..	3	60
						4
	Enlarged Cervical Glands (Non-tubercular) ..			14	..	135
					..	42
					..	119
	Defective Speech ..			1	..	35
					..	3
*Teeth—Dental Diseases ..	..	190	..	9	..	160
					..	3
*See note on Table 5. (3).						
Heart & Circulation ..	{	Heart Disease—				
		Organic ..	43	..	29	17
		Functional ..	66	..	334	3
		Anæmia ..	34	..	25	79
Lungs ..	{	Bronchitis ..	42	..	81	38
		Other Non-tubercular Diseases ..	10	..	328	60
						177
Tuberculosis ..	{	Pulmonary, Definite ..	8	..	—	21
		Do. Suspected ..	48	..	10	94
		Non-Pulmonary—				
		Glands ..	1	..	2	13
		Spine ..	1	..	—	1
		Hip ..	—	..	2	—
		Other Bones & Joints ..	—	..	—	1
		Skin ..	—	..	—	1
		Other Forms ..	3	..	—	4
Nervous System ..	{	Epilepsy ..	1	..	—	3
		Chorea ..	1	..	—	8
		Other Conditions ..	—	..	1	11
Deformities ..	{	Rickets ..	5	..	19	1
		Spinal Curvature ..	34	..	12	17
		Other Forms ..	35	..	32	41
Other Defects and Diseases ..	..	52	..	71	..	279
Number of Individual Children having Defects which required Treatment or to be kept under observation ..	..	..	..	..	..	7023

COUNTY OF CUMBERLAND.

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1922.

			Boys.	Girls.	Total.
Blind (including partially Blind) within the meaning of the Elementary Education, (Blind and Deaf Children Act, 1893)	Attending Public Elementary Schools — .. — .. —				
	Attending Certified Schools for the Blind — .. — .. —				
	Not at School — 1 .. 1 .. 2				
Deaf and Dumb (including partially Deaf, within the meaning of the Elementary Education, (Blind and Deaf Children Act, 1893)	Attending Public Elementary Schools 1 .. — .. 1				
	Attending Certified Schools for the Deaf 1 .. 1 .. 2				
	Not at School — .. — .. —				
Mentally Deficient	Attending Public Elementary Schools 4 .. 6 .. 10				
	Attending Certified Schools for Mentally Defective Children .. 2 .. 1 .. 3				
	Notified to the Local Control Authority by Local Education Authority during the Year .. — .. — .. —				
	Not at School — .. 4 .. 4				
Feeble Minded	At School — .. 3 .. 3 .. 6				
Imbeciles	Not at School — .. — .. —				
Idiots	— — .. — .. —				
Epileptics	Attending Public Elementary Schools 4 .. 1 .. 5				
	Attending Certified Schools for Epileptics — .. — .. —				
	In Institutions other than Certified Schools — .. — .. —				
	Not at School — .. — .. —				
Pulmonary Tuberculosis	Attending Public Elementary Schools 10 .. 13 .. 23				
	Attending Certified Schools for Physically Defective Children .. — .. — .. —				
	In Institutions other than Certified Schools — .. 3 .. 3				
	Not at School — .. 5 .. 9 .. 14				
Crippling due to Tuberculosis	Attending Public Elementary Schools 3 .. 8 .. 11				
	Attending Certified Schools for Physically Defective Children .. — .. — .. —				
	In Institutions other than Certified Schools — .. — .. —				
	Not at School — .. — .. —				
Physically Defective	Crippling due to causes other than Tuberculosis, i.e., Paralysis, Rickets, Traumatism	Attending Public Elementary Schools 40 .. 34 .. 74			
	Attending Certified Schools for Physically Defective Children .. — .. — .. —				
	In Institutions other than Certified Schools — .. — .. —				
	Not at School — .. 1 .. 5 .. 6				
Other Physically Defectives, e.g., delicate and other children suitable for admission to Open-air Schools: Children suffering from severe heart disease	Attending Public Elementary Schools 76 .. 72 .. 148				
	Attending Certified Schools for Physically Defective Children other than Open-air Schools — .. — .. —				
	Not at School — .. 6 .. 4 .. 10				
	Attending Open-air Schools — .. 2 .. 2				
Dull or Backward **	Retarded two years 225 .. 177 .. 405				
	Retarded three years 87 .. 67 .. 154				

** Judged according to age and standard. No case retarded more than 3 years to be included in this category unless it has been decided after examination by the Medical Officer that the child is not Mentally Defective.

DURING 1922.

or this period does not coincide with the (first December) the period to which the results

The methods adopted for treatment, and the general results obtained should be included in the body of the Report.

Disease or Defect.	Treated.		
	Referred for Treatment	Under Local Authorities	Other Organizations

		<i>Treatment.</i>		<i>Scheme.</i>			
Skin :—							
Ringworm—Head	..	111	..	95	..	16	..
Do. Body	..	56	..	54	..	2	..
Scabies	..	88	..	88	..	—	..
Impetigo	..	567	..	557	..	10	..
Minor Injuries	..	222	..	220	..	2	..
Other Skin Disease	..	206	..	175	..	27	..
Ear Disease	..	191	..	126	..	31	..
Eye Disease (External and other)	..	317	..	251	..	2	..
Miscellaneous	..	106	..	53	..	1	..

ent was considered necessary ..

C.—TREATMENT OF DEFECTS OF NOSE AND THROAT.						
Referred for Treatment .. . . . .	..	..	..	..	..	..
Received Operative Treatment :—						
Under Local Education Authorities Scheme—Clinic or Hospital ..	..	..	..	..	..	..
By Private Practitioner or Hospital ..	..	..	..	..	..	..
Total .. . . . .	..	..	..	..	..	..
Received other forms of Treatment .. . . . .	..	..	..	..	..	..

	Age Groupe.									
	5	6	7	8	9	10	11	12	13	14

(a) Inspected 260. . 264. . 234. . 132. . 1. . 17. . 32. . 37. . 32. . 39. . 26 . . 1074
by Dentist.

(b) Referred . . 209. . 219. . 202. . 77. . 1. . 17. . 32. . 37. . 32. . 29. . 26 . . 881
for Treat-
ment

(c) Actually . . 197 . . 182 . . 192 . . 44 . . 1 . . 17 . . 32 . . 37 . . 32 . . 29 . . 26 . . 790

... . - . - . - . - . - . - . - . - . - . - . - . - . - . - .

erstood that cases under this head are also included under (c).

<i>2. Particulars of time given and of Operations undertaken.</i>				
(1) No. of half-days devoted to inspections				2
(2) No. of half-days devoted to treatment				24

(2) No. of half-days devoted to treatment 24
 (3) Total No. of attendances made by the children at the Clinics . . 124

(7) Filled N1
 (8) Total No. of fillings 32

(9) No. of administrations of general Anaesthetics included in 4 and 6 91
No. of other Operations :—

E.—TREATMENT OF UNCLEANLINESS.

A statement should be included in the body of the Report, and should furnish :—

(a) The average number of visits per annum made by the School Nurses

(b) The total number of examinations made of children by School Nurses

(b) The total number of examinations made of children by School Nurses in the year in the School.

(c) The number of individual children found unclean.

(d) The arrangements made by the Authority for cleansing, and the number of children cleansed under these arrangements.

(e) A record of legal proceedings taken under the Children Act, 190

or the School Attendance Byelaws.

based on the headings in Table 2 should be helpful.

(a) The number of cases referred for treatment.
(b) The measures adopted for securing improvement.

- (c) The effect of the measure taken.

TABLE V.—SUMMARY OF TREATMENT OF DEFECTS AS SHOWN
IN TABLE IV. (A., B., C., D., BUT EXCLUDING E.).

Disease or Defect.	Number of Children.						
	Treated.						
	Referred for Treatment	Under Local Education Authorities			Otherwise.	Total.	
Minor Ailments 1864 .. 1619 .. 117 .. 1736							
Visual Defects 775 .. 114 .. 98 .. 212							
Defects of Nose and Throat 560 .. 69 .. 88 .. 157							
Dental Defects* 317 .. — .. 91 .. 91							
Other Defects 1000 .. 422 .. 294 .. 716							
Total 4516 .. 2224 .. 688 .. 2912							

TABLE VI.—SUMMARY RELATING TO CHILDREN MEDICALLY
INSPECTED AT THE ROUTINE INSPECTIONS DURING THE
YEAR 1922.

- | | | |
|-----|---|------|
| (1) | The total number of children medically inspected at the Routine Inspections** | 7521 |
| (2) | The number of children in (1) suffering from :— | |
| | Malnutrition | 27 |
| | Skin Disease | 213 |
| | Defective Vision (including Squint) | 678 |
| | Eye Disease | 109 |
| | Defective Hearing | 31 |
| | Ear Disease | 32 |
| | Nose and Throat Disease | 831 |
| | Enlarged Cervical Glands (Non-tubercular) | 149 |
| | Defective Speech | 36 |
| | Dental Disease | 199 |
| | Heart Disease : Organic | 72 |
| | Do. Functional | 340 |
| | Anæmia | 59 |
| | Lung Disease (Non-tubercular) | 485 |
| | Tuberculosis :— | |
| | Pulmonary : Definite | 8 |
| | Do. Suspected | 58 |
| | Non-Pulmonary | 9 |
| | Disease of the Nervous System | 3 |
| | Deformities | 140 |
| | Other Defects and Diseases | 123 |
| (3) | The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear), who require to be kept under observation (but not referred for treatment) | 1819 |
| 4) | The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.) | 1470 |
| (5) | The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.) | 768 |

*Apart from those dealt with by the School Dental Officer.

**“ Specials ” should not be included in this Table.

CUMBERLAND COUNTY COUNCIL

Education (Medical) Department.

APPENDIX B.

THE CRIPPLE
SCHEME

1922

BY

KENNETH FRASER, M.D., D.P.H.,
Deputy School Medical Officer.

GENERAL.

The Report which follows is a survey of the development in the County of Cumberland of a Scheme for the treatment of Crippled Children—mostly of School age, and a statement of the present position.

The development has been gradual, because exceptional difficulties had to be overcome, but the Scheme has now reached a stage of high efficiency, and the future should present few problems for solution. The principal difficulties have been two in number :—

- (a) The impossibility of treatment on an adequate scale at local Infirmarys.
- (b) The development of a proper system of :—
 - (1) Diagnosis ;
 - (2) After-care ;

the difficulties here were partly financial and partly geographical, in so far that many cripples who were unable to walk had to be brought long distances to our Cripple Clinics for diagnosis and treatment.

With regard to (a), it has been suggested that adequate surgical treatment could have been obtained at the Infirmarys and Cottage Hospitals in the County. It will be well at the outset to explain why this would have been quite impracticable. Apart from cases which have been treated at the Cumberland Infirmary and elsewhere in the County, there have been (till the end of 1922) 65 cases treated at Orthopædic Hospitals for children elsewhere. Of these 19 are still in Hospital, and yet the average length of stay in Hospital has been between eight and nine months ; there are anything up to 70 cases still awaiting admission, and, therefore, it is obvious that it would have been an impossible tax upon the beds of the general Hospitals of the County to have attempted to have had these cases treated locally. The average orthopædic case requires treatment of too prolonged a nature to be dealt with otherwise than at special Hospitals.

There is the additional point that a considerable number of orthopædic cases require very specialised treatment, often with special and costly apparatus—(e.g., the use of the Abbots frame in Spinal Curvature), and this treatment involves highly specialised and laborious plaster work, remedial and re-educational treatment, and too heavy a call on the electrical and massage departments to be practicable in a general Hospital.

The great majority of the parents of the children are also in poor financial circumstances, able to contribute very little towards the cost of Hospital treatment, for the obvious reason that the children of those of better fortunes are usually found to have been treated privately.

The scope of the problem, up to the end of 1922, was a total of 257 cases. That is to say 257 cases of crippling, or alleged crippling, had been brought to the notice of the School Medical Officer by that date. A few of these cases turned out to be non-orthopædic, one or two

did not call for treatment, but over 95% were cases of serious crippling, ranging from the simple club-foot to Paralysis involving all four limbs. Some four or five had never been able to stand, one or two would have become bed-ridden for life had treatment been longer delayed ; in one or two total Paralysis of one or more limbs was threatened.

The list was completed from names and facts submitted by Members of the Education Committee, by the Medical and Nursing Staff of the County, by the Chief Organisers of Physical Training (especially Mr. Gray, who has submitted a considerable number of names) by private practitioners, by head teachers, and by members of the general public. It is a remarkable thing that even with all these sources of information, we have not yet assessed our problem, as new cases come to notice every week. *The weakest point in the organisation is the discovery of early cases, that is in children under School age. This is most deeply to be regretted, because, broadly speaking, the earlier you get your cripple, the easier and the more efficient, as well as infinitely the more economical, is the treatment. This leads one on to say that the whole of our register of cripples is the tale of a tragedy, or, rather, a series of tragedies, because, had the cases been dealt with early enough, hardly one of the cases need have progressed to its present stage of disablement.*

The attitude to the cripple in this country, and indeed all countries, has been, until recently, far too much one of folded hands. The cripple has been too much regarded as one touched by the finger of fate, who must, therefore, be compensated by tea-parties and treats—a monstrous attitude, the duty of the community being to undertake the cure, and not merely the entertainment of the cripple.

DEVELOPMENT OF HOSPITAL TREATMENT.

It has been pointed out that we have been compelled to find our base Hospitals outside the County. We have sent, and are now sending, our cases to the Shropshire Orthopædie Hospital (first at Baschurch and now at Oswestry), and to the Ethel Hedley Hospital, Calgarth Park, Windermere.

The work being undertaken at the Shropshire Orthopædic Hospital was first brought to our notice by the late Chief Organiser of Physical Training after a visit to the Hospital, and from this dates the development of our Cripple Scheme. The first batch of cases was sent to Baschurch on December 13th, 1920. These early cases were very severe cases of crippling—two were unable to stand, and consequently the beds available were occupied by this batch of cases for a very lengthy period.

The first batch of cases was sent to the Ethel Hedley Hospital, on March 19th, 1920. At this time the Hospital equipment—operating theatre, plaster room, etc.—was not in full working order, and here also it was a considerable time before the first cases were discharged with treatment completed. The Ethel Hedley Hospital was at first wholly maintained by the founder and donor, Mr. O. W. E. Hedley,

ef Briery Close, Windermere. Latterly, the three Counties which send cases (Cumberland, Westmorland and Lancashire) have been asked, and have agreed to pay 25/- per head per week, Mr. Hedley being responsible for the remainder of the cost of maintenance.

It is fitting here to acknowledge Mr. Hedley's public-spirited generosity, and it is almost superfluous to say that the present arrangement is a remarkable good bargain for the Authorities concerned. The visiting surgeons at Windermere are Mr. Harry Platt, F.R.C.S., and Mr. E. S. Brentnall, F.R.C.S., both of Manchester.

SELECTION OF HOSPITAL CASES.

A vital part of the work has been the classification of cases in order of urgency. There are two reasons for urgency in considering this classification :—

- (a) Clinical grounds,
- (b) Age.

There are certain groups of cases which are more urgent than others on clinical grounds, *e.g.*, cases of active tubercular disease, especially spinal cases where evidence of Paralysis exists, and cases such as congenital dislocation of the hip, where treatment before a certain age is much easier and much more successful than later.

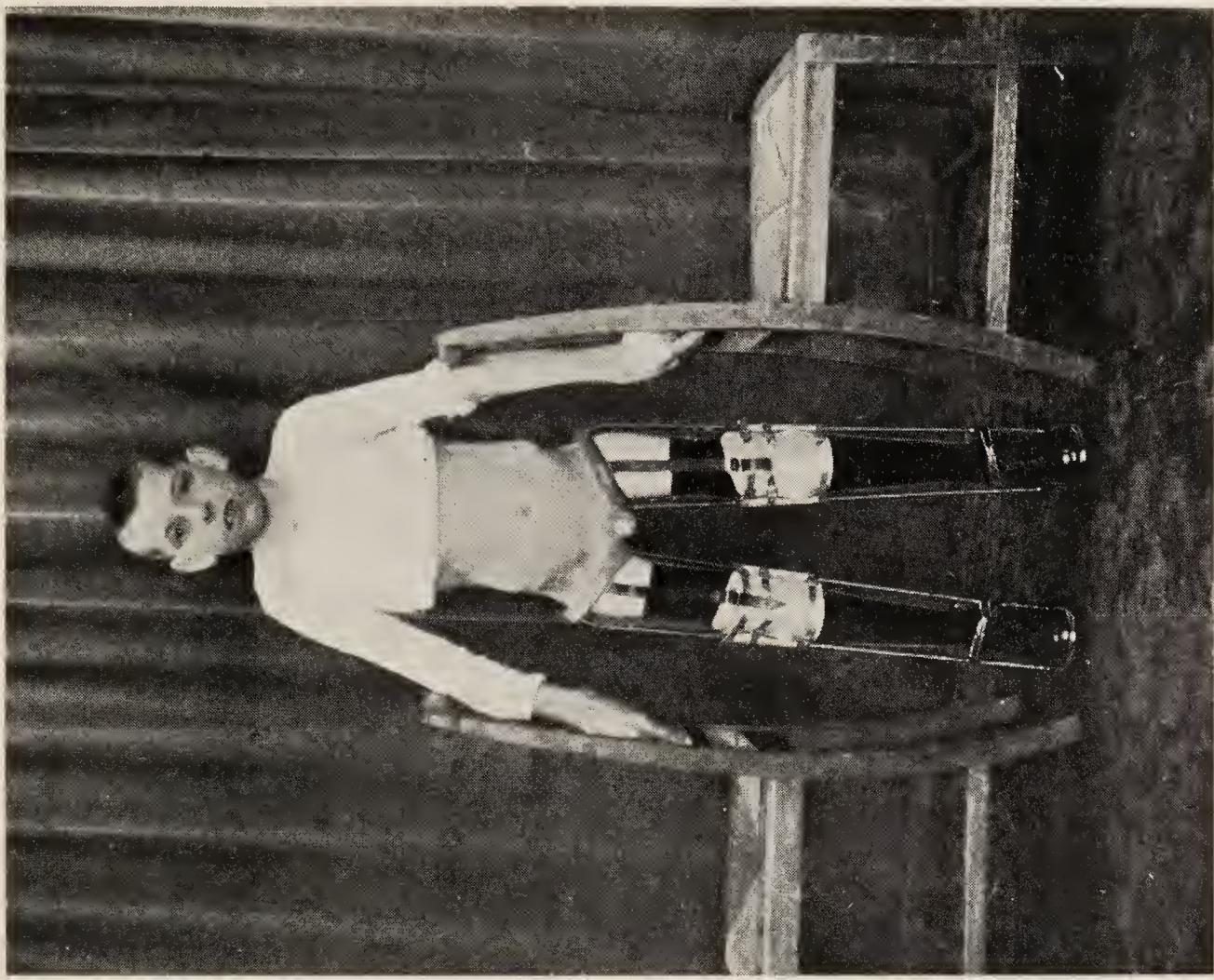
The point with regard to age is obvious without elaboration. If these cases are not treated before they leave School, the Authority (except in tubercular cases) is powerless to help, and the risk is that they will remain cripples permanently, chiefly for financial reasons. The great difficulty was that, when the problem was first attacked, a large proportion of the cases were "leavers." We have been able, however, to arrange matters satisfactorily, and I think only one case has left School without being offered appropriate treatment.

We are now gradually working down to the younger cases, and no further difficulty is anticipated on this point.

In the selection of cases, we have been guided by Mr. F. P. Noble, F.R.C.S., the Senior Medical Officer of the Shropshire Orthopædic Hospital, who has twice visited the County (in November, 1921, and in July, 1922).

Mr. Noble at these two visits has seen and classified, and advised treatment in 146 cases. He has kindly offered to come again in 1923 to deal with some 40 new cases, as well as to advise as to the after-care of those who have been to the Shropshire Hospital.

It is impossible to over-estimate the value of his help, which has been given at very considerable personal inconvenience, without remuneration of any kind.



TREATMENT IN PROGRESS

(PHOTOGRAPH TAKEN ON FIRST DAY OUT OF BED)



BEFORE TREATMENT

(UNABLE TO STAND WITH CRUTCHES)



BEFORE

AFTER

PLASTER CASTS SHOWING RESULT OF TREATMENT

DEVELOPMENT OF AFTER-CARE.

"After-care" is a fundamental part of any cripple scheme. It has reached a stage of 100% efficiency in Shropshire under the guidance of Miss Hunt, the founder of the Shropshire Orthopædic Hospital. The term "after-care" is really a misnomer, at least in this area, as under this part of the scheme is included not merely the after treatment of Hospital cases, but the preliminary treatment, by plaster, remedial treatment, etc., of cases before admission to shorten the period of stay. Under it is also included the provision of appliances, re-education and so on.

It is perhaps not fully realised that without adequate After-care the treatment of Orthopaedic cases is practically futile, so great is the tendency to relapse. We have come across a number of cases which had been operated on by surgeons of such repute that one might assume, without question, that the immediate result at the time of operation had been excellent, but which, for lack of adequate after-care—a difficult matter in country areas without a special organisation—had relapsed to a state as bad as, if not worse than, the original.

The development of an adequate system of after-care has presented more difficulty than all the rest of the Scheme put together, and remains the greatest tax on the Medical and Nursing Staff. Miss Hunt has at the Shropshire Hospital been, for many years now, devoting a considerable part of her time to the training of Nurses in the elements of after-care, plaster and appliance work, re-education and remedial treatment. Shortly after the work among Cripple Children started at Windermere, Miss Cornes, one of these Nurses, joined the Staff of that Hospital to undertake the after-care clinics in the three contributing Counties.

In February, 1921, the School Management Committee of this Authority approved of a joint Scheme of after-care with the other Counties, and a Medical Officer of the Authority was given one month's leave-of-absence in March, 1921, to study after-care at Manchester and Oswestry. In June of that year the School Medical Officer was authorised to establish and equip four after-care clinics at Carlisle, Penrith, Maryport and Whitehaven.

Unfortunately the Board of Education declined to sanction the payment of the travelling expenses of the Nurse by the individual Authorities. We were, therefore, in the anomalous position of paying our proportion of the salary of the after-care Nurse, whose services were not available, because we could not pay her travelling expenses.

Eventually a sufficient sum was raised by voluntary subscription to warrant the starting of the work.

To this fund (a list of subscribers to which is appended), a number of parents of Cripples, and others who take a kindly interest in the

Scheme, have subscribed. The administration of the fund is in the hands of a Medical Officer of the Authority. The Greystoke Women's Institute has twice contributed, and a demonstration of Physical Training, &c., at Cockermouth, on July 19th, 1921, was held in aid of the fund. The demonstration was organised by Miss Wardle, the Organiser of Physical Training for the area, and much valuable assistance was given by the Cockermouth teachers and the Headmaster of Dovenby School. The Local Committee of the Prince of Wales' Fund have given a generous donation.

It will, I am sure, be sufficient thanks to all those who have contributed, in money or labour, to know that without this fund the Cripple Scheme would have collapsed for lack of the key-stone.

Miss Hunt has given us most valuable assistance in the organisation of our after-care. She accompanied Mr. Noble at his visit in November, 1921, and at the invitation of the Executive Committee of the Women's Institutes for Cumberland, addressed a Meeting of Delegates in the Town Hall, Carlisle, on the subject of after-care.

The first after-care clinics were held in August, 1922, at four Centres, Carlisle, Penrith, Maryport and Whitehaven.

Similar Clinics were held in September, November and December. A full statement of the work undertaken at these Clinics is given later under "Treatment."

In all 82 children have attended, and have made 174 attendances. These Clinics have been successful beyond expectations, and in spite of long distances and the difficulties of transporting children in plaster splints, the attendance of parents and children has been extremely good.

Poor attendance has usually been caused by lack of ability to pay railway fares, and in such cases these are now being refunded out of the after-care fund. The fund is not large enough to deal with other than the most necessitous cases, and great care has been taken to ensure that the fund will not be imposed upon.

The credit for the successful organisation and conduct of these Clinics belongs primarily to Miss Cornes.

Her devotion, skill, and tact, have overcome all difficulties, and these have been neither few nor insignificant.

Dr. Hough, the Medical Director of the Ethel Hedley Hospital, has attended many of these Clinics. To him we owe very much for invaluable help in the matter of the admission of cases to the Hospital, and for assistance with the problems of after-care in these cases.

TREATMENT.

The cases that had received treatment up to the end of 1922 numbered 147.

(a) *Hospital Treatment.*

Exclusive of cases treated in the County, for the most part at the Cumberland Infirmary, and numbering about 15, there have been treated at the Shropshire Orthopaedic Hospital, 37, with an approximate average stay of nine months, and of whom 10 were still in Hospital at 31st December, 1922 ; and at the Ethel Hedley Hospital, 28, with an approximate average stay of eight months, and of whom nine were still in Hospital at the same date.

The table of operations performed is approximately as under :—

Subastragaloid Arthrodesis	..	..	..	..	15
Plantar Fasciotomy	..	..	..	..	16
Tenotomy	..	..	..	..	12
Wrenching	..	..	..	..	13
Elongation of Tendo Achilles	..	..	..	..	10
Subtrochanteric Osteotomy	..	..	..	..	5
Tendon Transplantation	..	..	..	..	7
Double Wedge	..	..	..	..	7
Sequestrotomy	..	..	..	..	4
Reductions under anæsthetics	..	..	..	..	2
Other	..	..	..	..	5

These figures are not complete, as the case sheets of those cases still in Hospital are not yet available.

AFTER-CARE AND REMEDIAL CLINIC TREATMENT.

The following appliances have been provided, either on discharge from Hospital or at the after-care clinics :—

Spinal Jackets	..	..	..	..	..	..	6
Calipers	..	..	..	..	..	..	15
Irons	..	..	..	..	..	..	41
Surgical Boots	..	..	..	..	..	..	20
Minor alterations to boots (metatarsal bars, crooks, tubes, and stops)	..	..	..	..	..	..	69
							151

Appliances which have ceased to fit are put into stock, and used, so far as possible, in other cases.

A large amount of plaster work has been undertaken as under :—
Abduction, "cock up," and similar plasters and night

Abduction, cock-up and similar plasters and night splints	..	..	..	..	..	..	56
Casts for Surgical Boots	..	..	..	..	..	..	7
Casts for Spinal Jackets	..	..	..	..	..	..	1
							—
							64

The children in receipt of remedial treatment and re-education have numbered 22, and these have made a large number of attendances at the Remedial Clinics.

Miss Fraser, the Chief (Woman) Organiser of Physical Training, has taken a great interest in the remedial treatment, and has supervised the home exercises of many of these cases.

Remedial treatment and re-education is a fundamental part of the treatment of Cripples. In cases of spinal curvature, for example, after the curvature has been, as far as possible, corrected by plaster, or suspension, or the Abbot's frame in Hospital, it is necessary to strengthen by appropriate exercises the weaker muscles to maintain that correction.

In cases of tendon transplantation, or of spasm of muscles, etc., re-education is necessary to obtain the best results, after other methods have laid the foundation.

As a preliminary measure, too, the Remedial Clinic has a very definite place. In many spinal curvatures remedial treatment can, by loosening the spine, greatly shorten the period of Hospital treatment, and so greatly reduce the cost of treatment.

In fact an efficient system of remedial clinics can prevent large numbers of deformities from developing at all.

We have seven Clinics equipped for remedial treatment in this County. Probably no other County is so well provided. Unfortunately after the 31st December, 1922, all remedial treatment in the Elementary Schools, and in the majority of the Secondary Schools, will cease. *The inevitable result will be the development of new deformities at present in early stages, to the definite Hospital stage, at which stage treatment is prolonged, and expensive, and may be very limited in its benefit.* There is, for example, at the present moment in Hospital a case of very severe spinal curvature, the treatment of which will cost the County at least £100, which by simple remedial treatment years ago could have been cured at a negligible cost. This case is now one of fixed deformity, and treatment is only undertaken because otherwise the case would have become bedridden for life.

OTHER FORMS OF TREATMENT.

Cases receiving general treatment, e.g., for rickets . . .	12
Wassermann Tests	2

CASES AWAITING TREATMENT.

Waiting admission to Hospital at 31st December, 1922	41
Cases not yet classified (of whom the majority will require Hospital treatment)	31

It may, therefore, be said that the Hospital waiting list at the end of the year was between 60 and 70, and this list is receiving additions at least every week.

CONTRIBUTIONS BY PARENTS.

Parents have been asked to contribute towards the cost of treatment whenever possible. They have contributed in four ways :—

- (a) By sending their children as private patients to Hospital.
- (b) By contributing towards the cost of maintenance in Hospital.
- (c) By providing boots and appliances or contributing to the cost of these.
- (d) by subscribing to the After-care fund.

Four cases have been wholly maintained at Hospital by their parents, and in several cases not yet admitted, the parents have agreed to bear the whole cost of Hospital treatment.

The contributions under (b) have been numerous, usually in the form of small weekly sums ; these contributions for the current financial year are at the rate of about £100 per annum. Under (c) parents have provided 46 out of the 150 boots and appliances supplied, and have been responsible for 4 out of the 26 repairs and replacements. Under (d) parents have subscribed £7 19s. Od.

These total payments by parents have amounted in the aggregate to some hundreds of pounds, which, had the burden been equitably distributed, would have been very satisfactory.

Unfortunately some have taxed themselves unduly, while others in similar financial circumstances have attended in their oldest clothes and pleaded poverty which was non-existent. This practice will be very carefully investigated. It is dishonourable in the extreme, because it has been most carefully explained that the more parents contribute the more Cripples we will be able to treat.

REFUSALS.

These have been relatively very few, and no doubt will eventually cease entirely. The standpoint of refusal has been varied, as under :—

(a) Refused all treatment	..	..	..	22
(b) Admitted to Hospital, but refused operation	..	..	..	1
(c) Refused after-care after Hospital treatment	..	..	..	1
(d) Refused Hospital vacancies	..	..	..	3
(e) Failed to attend Clinics	..	..	..	10
(f) State will see Specialists privately	..	..	..	3
(g) Other forms of refusal	..	..	..	3

Of the (*a*) group, three have been referred to the National Society for the Prevention of Cruelty to Children, and the Inspector of the Society has interviewed the parents, with the withdrawal of refusal in two cases. In the third, and in a number of the others, it may be necessary to proceed to prosecution. Failure to obtain or accept the treatment for a crippled child through sheer obstinacy is manifestly cruelty within the meaning of the Act, and one does not see that any Bench could fail to convict.

With regard to group (*f*) the position is more difficult, one can only say this : that the promises of parents who have allowed a child to remain crippled for lack of treatment over a period of 8 to 10 years are at least suspect.

IN CONCLUSION.

There are some general points to note, not falling under the foregoing headings.

Of the 257 cases, 31 have been Secondary School children, and 224 Elementary School children.

Two tuberculous cases, over School age, have been transferred to the Health Committee, who have accepted responsibility ; one of these declined the offer of a Hospital vacancy.

The question of temporary artificial limbs may shortly require to be considered ; these are inexpensive.

The question of employment has not arisen in a serious form yet it may soon do so as the children begin to leave School. One case has been placed in domestic service ; this girl, very seriously crippled, had no home, and was only fit for very light work. A suitable situation was arranged.

A number of the cases have shown marked signs of feeble-mindedness. In the majority of these cases treatment may not be proceeded with, at least institutional treatment, the expense not seeming to be justified.

It is impossible to close without a reference to the extremely valuable work done by Dr. McMurtrie in the most laborious work of keeping the case papers and records, and arranging the time-tables of all the Clinics. Taken as a whole, the Cripple Scheme occupies about one-third of the time of a Medical Officer.

Miss March has given most valuable help with the nursing arrangements.

ORGANISATION OF A CRIPPLE SCHEME.

It may be useful, from the point of view of other areas, who have not yet set a Cripple Scheme in operation, to set out, with a few comments, the steps along which the development of a scheme may best proceed :—

- (1) It is necessary first to assess the extent of the problem in the area, and the more sources of information as to Cripples in the area that can be utilised the better. It is important to review all children "not at School," as many of these are non-attenders because of crippling conditions.
- (2) Having arranged with the Orthopædic Hospital (or Hospitals) selected, the cases must be arranged in order of urgency—
 - (a) on medical grounds,
 - (b) with reference to age, and
 - (c) other cases.
- (3) "After-care" should be organised to deal with discharged cases from the outset, and to deal with cases before admission to shorten the Hospital period of treatment. Monthly Clinics are necessary, and the person in charge must have a full knowledge of plaster and appliance work, and of re-education.
- (4) The cost of equipment of these Clinics is small; the costly apparatus can be carried from place to place.
- (5) Receiving appliances which have ceased to fit into "stock," and re-issuing of these will save expense.
- (6) A voluntary subscription fund for travelling expenses, etc. in necessitous cases is invaluable.

1922.	RECEIPTS.				
Jan. 1—	To Balance brought forward	.. . . .	..	£0	3 4
" "	Greystoke Women's Institute (per Hon. Sec.)	.. . .	..	5	0 0
" "	Miss Bolton, Leeming House, Watermillock	.. . .	..	5	0 0
" "	Miss Thomson, Ashbank, Penrith	.. . .	..	0	10 0
" "	Miss Toppin, Musgrave Hall, Penrith	.. . .	..	1	0 0
April 1—	„ Mrs. Routledge, 40 Stricklandgate, Penrith	.. . .	..	0	2 6
" "	Mrs. Kitelien, 24 Sandgate, Penrith	.. . .	..	0	10 6
" "	Mrs. Hodgson, Netherby Street, Longtown	.. . .	..	0	6 0
July —1	„ Physical Training Demonstration, Cockermouth	.. . .	..	10	0 0
Aug. 1—	„ Collected by Myles F. Burnyeat, Esq. :—				
	Myles F. Burnyeat, Esq., Moresby House, Whitehaven	£5	5	0	
	R. D. Mc.Cowan, Esq., Roseneath, Moresby	3	3	0	
	Mrs. Mc.Cowan, Roseneath	2	2	0	
	Mrs. S. F. Burnyeat, Millgrove	3	3	0	
	J. Paisley, Esq., Stangends, Wasdale	0	5	0	
	R. Lueock, Esq., Workington	0	5	0	
	Wm. Atkinson, Esq., St. Bees Abbey	0	5	0	
	R. A. Crichton, Esq., High Walton, St. Bees	0	5	0	
	Thos. Mossop, Esq., The Rookery, Rattington	0	5	0	
	J. Wade, Esq., 140 Queen Street, Whitehaven	0	5	0	
	J. Williamson, Esq., Ennerdale	0	5	0	
	E. Burnyeat, Esq., Whitehaven	0	10	6	
	C. B. Dalzell, Esq., Hamilton Terrace, Whitehaven	0	10	6	
	W. M. Dalzell, Esq., Seascale	0	5	0	
	Wm. Mc.Gowan, Esq., Sorbie, Corkickle, Whitehaven	0	5	0	
	John Hunter, Esq., Howgate, Moresby	0	5	0	
	John Proud, Esq., do.	0	2	6	
	R. R. Kendall, Esq., Commongate Farm, Moresby	0	5	0	
	J. C. Carruthers, Esq., Round Close, Moresby	0	5	0	
	Jos. Carruthers, Esq., Round Close	0	5	0	
	Jno. Litt, Esq., Parton	0	5	0	
	Jno. Corlett, Esq., Parton	0	5	0	
	Mrs. Annie White Clarke, Parton	1	10	0	
				£20	1 6
Aug. 1—	To Mrs. Beaty, Warwick Bridge .. . .	.. . .	..	0	5 0
" "	„ Mrs. Rogerson, Aspatria .. . .	.. . .	..	1	0 0
" "	„ Mrs. Cairns, Eden View, Armathwaite	.. . .	..	0	10 0
" "	„ Mrs. Irving, Flimby Lodge, Flimby .. . .	.. . .	..	5	0 0
" "	„ Sir Frederick Chance, Lanerigg, Grasmere .. . .	.. . .	..	10	0 0
Sept. 1—	„ Grant from Cumberland Prince of Wales' Fund Com- mittee (per Lady Mabel Howard) .. . .	.. . .	..	20	0 0
" "	„ Mrs. Robinson, Brook House, Thursby .. . .	.. . .	..	0	5 0
Dec. 1—	„ Greystoke Women's Institute (Proceeds of Sale of Work) per Mrs. Smith-Hill .. . .	.. . .	..	15	0 0
				£94	13 10

FUND.

	PAYMENTS.	1922.
By Travelling Expenses of After-care Nurse (4 months) ..	.. £9 6 1½	
,, Fares Refunded to Parents .. .. .. ..	.. 2 4 5	
,, Casual Purchases, Bandages, Ointments, &c. .. ..	.. 0 12 10	
,, Other Expenses .. .. .. ..	.. 1 4 8	
,, Cheque Book .. .. .. ..	.. 0 2 0	

Balance, being Cash in Hand and at Bank, at 31st December,

1922 81 3 9½
------------------------------	------------

£94 13 10

GENERAL SUMMARY

Total No. of Cases referred for Review to 31st December, 1922.—257.

Of those classified the cause of Crippling was :—

The Crippling condition was :—

Deformities of the Foot only (Talipes, pes cavus, etc.)	45
(5 double)	45
Congenital Dislocation of the Hip 10 (3 double)	10
Knock Knee	7
Hemiplegia	11
Quadriplegia	1
Loss of Limb (Amputations)	5
Severe Spinal Deformity 33 (Non-tubercular, 23 ; Tubercular 10) ..	33
Osteomyelitis 10 (Non-tubercular, 8 ; Tubercular, 2)	10
Flat Foot	14
Spastic Paraplegia	5
Pseudo-coxalgia.	2
Other conditions (Paralysis of various Limbs ,Ankylosed Joints, Shortening of Lower Limbs, Flail Feet, &c.)	78

TABLE.

Total No. of Cases treated to 31st December, 1922.—147.

Hospital Admissions	..	..	..	..	..	..	80
Appliances provided	..	..	..	..	..	..	151
Plasters	..	..	..	..	..	..	64
Remedial Treatment	..	..	..	..	..	..	22
Other Treatment	..	..	..	..	..	..	14
Awaiting Treatment at 31st December, 1922, approximately	..	..	..	..	..	..	70
Refusals (various forms)	..	..	..	..	..	..	43
Too Advanced for Treatment	..	..	..	..	..	..	7
No further Treatment required	..	..	..	..	..	..	10
In Stannington Sanatorium	..	..	..	..	..	..	2
Left the District	..	..	..	..	..	..	3
Dead	..	..	..	..	..	..	3
Chargeable to Other Areas	..	..	..	..	..	..	1
Under Private Treatment	..	..	..	..	..	..	?

APPENDIX C.

To the Chief School Medical Officer.

SIR,

I have the honour to submit to you my Annual Report for the year 1922. In putting this before you, may I take the opportunity of thanking the Committee, through you, for their consideration to me in my recent illness. The period of absence has unfortunately taken a toll of our annual figures, but apart from this, the results for the year are gratifying. Parents are inclined to take more advantage of the treatment provided, and more help is forthcoming from headmasters and mistresses in the propaganda portion of the work. Two Schools were particularly satisfactory, Brampton Council and Cleator Council. The number of acceptances in these two places being practically 100% and it is only fair to acknowledge the very great assistance of the head teachers in getting this result.

The principle item of an unsatisfactory nature is the failure to educate the children to take care of the cleansing of the teeth at home. It seems an almost hopeless task to get this carried out under the present scheme of things, whereby everything is left to the parents. Personally I feel very strongly that some strict form of supervision at School, or pressure on the part of the parents at home, is necessary to get this habit inculcated in the children.

In most families it is not an unknown thing to have to refer ones son or daughter, aged 7 or 8, to the bathroom for further attention to the neck, ears, hands, etc. These parts of the human anatomy are very apt to be missed in the hurried toilet of young folks, and, unfortunately, the teeth are so well hidden in the mouth that they often escape the eye. It is only by constant supervision on the parents part until the child attains to fixed and cleanly habits that the teeth can be brought through safely to adolescence.

The principle damage to teeth is done between the ages of 5—15 years, and if once a child can be got through these years, the liability to dental caries is much less. Again habits of cleanliness are beginning to be firmly established at 15, and the child who has been in the habit of a daily tooth cleansing from early childhood is no longer comfortable starting the day without the usual mouth toilet.

The three golden rules for the care of the teeth are :—

1. The cleansing with a brush both night and morning.
2. The cutting down of sweet and sugar eating to very reasonable limits.
3. The consumption of plenty of fruit of all kinds after meals.

The apple is a particularly good fruit to use in this way, and I know of no finer cleansing agent for the mouth.

No. 1 is the rule we cannot get carried out at present, and it is the most important of the three.

In the last year's report it was suggested that certain measures be taken in the Schools to get the children to clean their teeth *at School*. The result would, I feel sure, justify the experiment. Also a daily cleansing of the mouth would *help considerably to lessen epidemics* of scarlatina, diphtheria, mumps, etc., where the principal channel of infection is by the mouth.

In connection with this supervision of oral hygiene at School, it may be instructive to refer to Brampton Secondary School. The headmaster is a very keen and thorough exponent of sanitation and hygiene. He periodically takes a look at the mouths of children who happen to be before him for other purposes. Also the parents of all new entrants to the School are informed that they must take their children to a dentist and have their mouths put into a healthy condition.

I can only say that as a result of these measures, it is a real pleasure to examine the mouths of 95% of the children in the School. They possess the type of mouths one sees at first-class boarding Schools, where there is a matron to attend to these matters, and enforce them.

If, from these measures, such excellent results have accrued, it should be possible in time to set the same standard in the majority of the other Schools, both Secondary and Elementary, provided a little pressure is used. It may be argued that this is removing parental control. That is so, but on the other hand the vast majority of the parents with whom I have to deal have never been educated up to the importance of the dental toilet.

During the year Maryport and Brampton have been completed, and the dental clinics closed. New dental clinics have been opened in Cleator Moor and Aspatria. It is curious that once again Aspatria confirms last year's findings in Brampton, viz., that the teeth in the agricultural areas are less susceptible to disease than those in the industrial. In examining Aspatria, I felt at once that it could be made into an area whose children possessed first-class dentitions. Again the crux of the whole matter being the regular daily cleansing of the teeth.

In conclusion, I cannot urge too strongly the necessity of tackling thoroughly this cleansing problem. Treatment is palliative only ; it lulls toothache, and renders the mouth healthy for a term of years, but unless the habits of cleanliness are firmly inculcated, it is only a temporary affair at the best, and much more permanent results will accrue from educational efforts than those of a dento-surgical nature.

I have the honour to be, Sir,

Your obedient servant,

F. E. GILLIERON,

School Dental Officer.

APPENDIX D.

**REPORT ON PHYSICAL TRAINING FOR THE YEAR ENDING
DECEMBER 31ST, BY MARGARET FRASER, CHIEF (WOMAN)
ORGANISER, 1922.**

Satisfactory progress has been made during the year, though it has not been possible, owing to the urgent need for economy, to expand the work as I had hoped. In spite of difficulties, the standard of work throughout the County, has noticeably improved, and both Head and Assistant Teachers have co-operated loyally in the endeavour to bring this important part of the School curriculum to a high level.

STAFF.

At the beginning of 1922, the Staff consisted of :—

- 1 Chief Woman Organiser.
- 3 Assistant Organisers.
- 1 Instructress for Secondary Schools.

Miss MacLaren, Assistant Organiser for the Penrith district resigned in May, and this vacancy was not filled until September, when Miss Petty, Bedford Physical Training College, reported for duty.

Miss Wardle, Assistant Organiser for the Cockermouth district, left the County in August, as she had been appointed Lecturer in Hygiene and Physical Training at St. Hild's College, Durham. The Committee decided for reasons of economy not to appoint anyone in her place.

GENERAL SUMMARY.

A new scheme had to be devised in January, by which the County was divided into four districts, instead of five as formerly, the Committee having decided not to fill the vacancy caused by Miss Fyfe's departure.

A further re-organisation of the work was rendered necessary in September, when the Committee decided not to appoint anyone in Miss Wardle's place. The County, therefore, had to be re-divided into three, instead of four districts, thus considerably increasing the work of the Chief Woman Organiser and two Assistant Organisers.

CONFERENCES.

A Conference of the Physical Training Staff was held in March, and another one in November, the Director of Education being in the Chair, and the Chief Medical Officer also being present. These Conferences are very helpful, and by preventing overlapping, tend to increase co-ordination.

TEACHER'S CLASSES.

The attendance at the Physieal Training Classes held during 1922, has been remarkably good, and the Teachers are to be congratulated upon the keenness and enthusiasm which they have shown. Many of them have made long journeys by train, 'bus, cycle, or on foot, in order to attend (at their own expense), and a large number have never missed a single lesson.

District.	Length of Course.	Number Enrolled.	Number Obtained.	Certificates	Teacher.
Cockermouth	.. 10 hours	.. 25	.. 18	..	Miss Wardle.
Carlisle	.. 15 "	.. 28	.. 25	..	Miss Fraser.
Aspatria	.. 15 "	.. 47	.. 42	..	Miss Wardle.
Egremont	.. 15 "	.. 26	.. 21	..	Miss Moulson.
Carlisle	.. 10 "	.. 32	.. 26	..	Miss Fraser. (Folk Dancing).
Workington	.. 10 "	.. 31	.. 27	..	Miss Fraser. (Infant Teachers).
Workington	.. 21 "	.. 36	.. 29	..	Miss Fraser. (Senior Teachers)

Total number enrolled —225.

Total number Certificates.—188.

At the completion of each course Certificates were awarded to those teachers who had made 70% attendances, and Members of the Education Committee, Head and Assistant Teachers, were invited to see some of the work which had been done in the classes.

Cockermouth Class.

On Wednesday, March 15th, the Teachers attending the Cocker-mouth Course for Infant and Junior School Teaehers, gave a Display of Physical Training, Nursery Rhymes, and Dances suitable for use in the Schools. Miss Harris kindly presented the Certificates, and in a short speech showed her sympathy with the work. Mr. Williamson, of Moorside, was also present, and spoke a few words of encouragement to the teachers.

Carlisle Class.

On June 17th a large number of teachers were present in the King's Hall to witness an informal demonstration of Physical Training on the occasion of the distribution of attendance Certificates. Physical Exercises, Games, and Dances suitable for Upper Standards were demonstrated by the Teachers attending the Course, the Infant work being shown by a class of Infants from Hayton C.E. School, under the direction of their teacher, Miss Dalton. The Director of Education presided, and gave a valuable address on the importance of "*mens sana in corpore sano.*" and pointed out the difference between modern methods, and those which obtained some years ago. When presenting the Certificates, Mr. Hodgson complimented the Teachers on their exeellent attendance, and urged them to take advantage of any future

opportunities of improving their knowledge of this important subject. Dr. Morison was also present, and drew the attention of the audience to the evident enjoyment of the children in their exercises, and to their prompt and accurate response to the commands given.

Aspatria Class.

On June 22nd, in the Co-operative Hall, Aspatria, Head Teachers from all Schools within a reasonable distance assembled to witness an exhibition of Physical Training, Nursery Rhymes, Games and Dances suitable for Upper and Lower Standards, in which the Teachers who had attended the recent course took part. Infant work was shown by a class of Infants from the Aspatria Council School, under the direction of their teacher, Miss Dobson. Mr. Foster, C.C., presided, and when presenting the Certificates, spoke to the Teachers of the importance of Physical Training in Schools, and of the great benefits which the children derive, mentally and physically, from their Physical Training lessons.

ACCOMMODATION.

The bad conditions alluded to in my last Report still obtains, only in a very small number of Schools is there any provision for Physical Training in wet weather.

PLAYGROUNDS AND PLAYING FIELDS.

The majority of Schools are greatly handicapped by the condition of their playgrounds, which in many cases is really deplorable.

Clean, dry playgrounds are essential for an efficient scheme of Physical Training, and it greatly retards the work, when day after day the playground is practically under water. Playing Fields are necessary if organised games are to be properly carried out, and it is gratifying to note that a number of Schools have obtained fields by their own efforts. The Committee have very wisely decided to pay half the rent of suitable fields, and this is proving a valuable stimulus to local effort in the matter.

EQUIPMENT.

The following apparatus has been issued to Schools during 1922 :--

Footballs complete (Heavy and Light)	90
Net-Ball Sets	26
Rounders Bats and Balls	18
Soft Balls	31
Bean Bags	126
Cricket Bats	45
,, Balls	40
,, Wiekets	63
Ropes	32

This equipment, provided by the Committee, has been greatly appreciated during the year, and has added to the interest of Teachers and Scholars in the Physical Training and Games lessons.

ORGANISED GAMES.

Organised Games play an important part in any sound scheme of education. In addition to their physical benefits, which are obvious they develop a sense of responsibility, fair play, and leadership, not easily obtained without their aid.

There has been a large increase in the number of schools which have adopted Net-ball as their chief game, and in several cases, a high standard of play has been achieved.

The majority of Schools in the County are too distant from each other to play many matches, but in the West a local Net-ball League has been formed, which should prove a stimulus to the game in that district.

Captain Ball and Rounders are also becoming more popular, very successful Rounders matches have been played by two Schools in the Carlisle Area.

SPORTS.

Keswick and District Girls' School Sports.

On Thursday, June 29th, Inter-School Sports were held at Keswick, in which all the girls from Crosthwaite, St. John's and Braithwaite Schools competed. Points were awarded for each race, and the Silver Cup, presented by Mr. Marshall, was won by Crosthwaite Girls' School.

Cockermouth Schools Athletic Association again held their Sports in July. During the afternoon a demonstration of Physical Training (including Games and Dances) was given by 48 girls selected from All Saints', Fairfield, and St. Joseph's Schools, under the direction of Miss Wardle, Assistant Organiser for the district (who had coached the girls out of School hours).

Several Schools held Sports Days of their own, competition among the scholars being very keen.

DEMONSTRATIONS.

Demonstration at Cockermouth in aid of the Crippled Children's Fund.

A large audience assembled in the Cockermouth Drill Hall, on Wednesday, July 19th, when the girls from All Saints', Fairfield, and St. Joseph's Schools, repeated the Physical Training Display which they had given at the School Sports. The programme was augmented by songs from All Saints and Dovenby Scholars, and National Dances by St. Joseph's Girls. No admission was charged, but a collection in aid of the Crippled Children's Fund was taken during the evening, and £11 was raised. Colonel Dykes presided, and Dr. Morison spoke of the importance of the work which was being carried on among Crippled Children in Cumberland.

Very great credit is due to Miss Wardle, who arranged the Demonstration, and the Teachers and Scholars, who co-operated whole-heartedly in making the evening a success,

DEMONSTRATION AT EGREMONT.

Miss Moulson, Assistant Organiser for Millom and Whitehaven Rural District, reports that the great interest taken in Physical Training in that district is shown by the fact that three Displays have been given by girls from the Elementary Schools during the past year, and each one has been very well attended.

The first was held in Egremont Town Hall, on March 18th, and consisted of Physical Exercises, Competitive Games and Dances in which girls from Moor Row, Bookwell, St. Bridget's, Cleator, St. Bees, and Bigrigg Schools, took part. Mr. Kaye, Headmaster of St. Bees School, presided, and gave a sympathetic address on the need of Physical Training for both sexes in all types of Schools. Mr. Devlin and Mr. Edmonds were both present, and expressed their appreciation of the work shown by the girls, and their belief in the value of this branch of School work. The dresses worn by the girls were all made by the Teachers, to whom great credit is due.

A similar display was given on June 14th, by *Bookwell Girls' School*, and on July 21st by all the girls and one class of boys from *Moor Row Council School*. A very good standard of work was shewn by both these Schools, and Teachers and Scholars are to be congratulated on the result.

SECONDARY SCHOOLS.

The Thomlinson Girls' School, Brampton and Alston Secondary Schools, have continued to receive instruction from Miss Wisnom of the County Staff.

Brampton Secondary School has maintained a good standard of work in spite of the primitive nature of the accommodation afforded. The desirability of a larger gymnasium, with better ventilation, and heating, should, however, be kept well in view. There is no gymnasium at the *Thomlinson Girls' School*, and the Physical Training has to be taken in the hall, where there is no apparatus of any kind, not even Balancing Forms. The work at Keswick and Millom Secondary Schools has been taken by the two Assistant Organisers, who have spent one day per week in these Schools. Penrith Grammar School, Carlisle, Workington, and Whitehaven Secondary Schools, have fully qualified Specialists on the Staff.

DEMONSTRATION AT KESWICK SCHOOL.

On June 19th, the boys and girls of the 1st Form, and the girls of the Upper School, gave a display of Physical Training, Games and Dances, under the direction of Miss Wardle. Great interest was shown by parents and friends of the scholars.

REMEDIAL CLINICS.

At the beginning of the year there were three Remedial Clinics open, Cleator Moor, Keswick, and Maryport. In addition, the Remedial Clinic at Wigton was opened at the beginning of March, and the attendance at Keswick having fallen off, it was decided to close it, and re-open the one at Penrith instead. Unfortunately, two months later the Penrith Clinic had to be closed, owing to the resignation of Miss Maclaren.

Full advantage has been taken of the opportunities of treatment at these Clinics, and many successful results have been obtained. The cases treated have been mainly Scholiosis and Kyphosis, Paralysis Flat Foot, and in addition, we have had patients recommended by Doctor Noble, in connection with the County Cripple Scheme for general loosening treatment preparatory to entering Hospital, and for re-educational treatment after Hospital.

The work has been undertaken by the Assistant Organisers, who are qualified to give Remedial treatment, and they have each spent two days per week in the Remedial Clinics.

When the Physical Training Staff was again reduced, thus making it impossible to carry out the work in its entirety, it became necessary gradually to close the Remedial Clinics, and to arrange to discontinue this work altogether, as from the end of 1922. The School Medical Officer concurred, that in the circumstances, which compelled the limitation of Remedial work to two or three centres, at very prolonged intervals, the closure was justified from the standpoint that the greatest good of the greatest number would be best attained by concentrating on the Physical Training of the normal children in the ordinary routine of the work.

Table of Attendances at the Remedial Clinics in 1922.

District.	Length of time open.	Attendances.
Cleator Moor	.. January to December ..	.. 163
Egremont ..	.. June to November ..	.. 85
Maryport ..	.. January to July ..	.. 360
Keswick ..	.. January to March ..	.. 100
Penrith ..	.. March to May ..	.. 26
Wigton ..	.. March to December ..	.. 441
Total attendances		1177

The majority of these attendances have been made by children from the Elementary Schools, but at Wigton Clinic, pupils from the Nelson Boys' School, and the Thomlinson Girls' School, have also been included.

APPENDIX E.

PHYSICAL TRAINING.

I beg to submit my report on the Physical Training for the year ended 31st December, 1922.

On the whole very satisfactory progress has been made throughout the County during the year. The teachers now realise the importance of Physical Training, and co-operate very willingly with the organisers in the endeavour to make the lesson both interesting and beneficial. At the beginning of the year, the work was handicapped for a time owing to the re-organisation of school staffs, and an epidemic of Influenza.

Hints to teachers:—

Object of Physical Training.

1. To encourage alertness, independent action, and a ready response to unexpected directions.
2. To maintain flexibility of body, and so prevent or reduce the need of corrective exercises in later years.
3. To stimulate the respiration and circulation by encouraging great activity, and so aiding growth.
4. To encourage a bright, happy, fearless and independent spirit.

Time.

There is still a slight inclination to adhere to the old arrangement of having lessons of thirty minutes duration. It has been proved beyond doubt that lessons of twenty minutes duration are much better.

Drill.

The word "Drill" should be eliminated from the Time Table, as "Physical Exercises" is a much more appropriate term for the new work, with its fine blending of General Activity and Formal Exercises.

Wet Weather.

When the children cannot go out to the playground or shed for their daily lesson, an occasional few minutes of brisk exercise in the classroom with the windows open helps to stimulate the respiration and circulation.

Rest.

To rest does not always mean to do nothing. Often the best rest is a change of work. A few minutes Physical Exercises (especially in winter) will often provide the necessary rest, and at the same time brighten up the children.

Playgrounds.

A great many of the playgrounds are very much in need of repair, and are quite unfit even in dry weather for a satisfactory lesson to be given. The managers of Parton Williamson's Boys' School are

to be congratulated on their enterprise in transforming one of the worst playgrounds in the County into one of the best. This playground has been cemented, and is now a great asset to the school. The School and its surroundings is now one of the cleanest and brightest spots in the village ; this is as it should be. At Eaglesfield Paddle School another splendid playground has been laid out.

Something will have to be done at Cleator Moor if St. Patrick's playground is not improved. To allow for the lack of playground accommodation there, and at Montreal School, we secured the use of the old Market Hall three years ago, but since then it has been used as a canteen.

A good playground is most essential, speaking from a health point of view, and as many are nothing more than "mudheaps" in wet weather, it is hoped the Committee will see their way to improve them before another winter.

Playing Fields.

The fear of incurring expense has had a rather handicapping effect on the securing of playing fields. There is still need for central fields at Cleator Moor, Maryport, Millom, Penrith and Wigton. Playing fields are essential if organised games are to be carried out successfully. The Head Teachers who have paid the rents of their playing fields from the proceeds of their school concerts are to be complimented.

Apparatus.

The apparatus supplied by the Committee for the Organised Games in Elementary Schools provides a real want, as at present the children have not the wherewithal to secure any apparatus for themselves. I have augmented the Committee's allowance to some extent by the proceeds from my demonstrations.

Cricket.

The game of cricket is gaining in popularity among both teachers and boys. All encouragement will be given to arrange inter-school matches, and it is hoped that in the near future this game will be as popular in summer as football is in winter. Unfortunately the very wet summer of this year prevented a start being made at many of the Schools.

At Fairfield Boys' School, an "Old Boys' Club" has been formed, and is proving successful in promoting good sport among the boys who have left School. The Headmaster is the guiding influence, and gives up quite a lot of his spare time to the interest of the Club.

Swimming.

About 70 boys from the Elementary Schools in Wigton attended the Baths during the Summer season. By the end of the season 90 per cent. of these boys were able to swim. About 50 girls also attended from the above Schools, and at the end of the season 50 per cent. could

swim. The proposal to have the Senior children taken regularly to the Baths by a teacher during School hours has been a great success. The instructor at the baths has given the boys and girls very careful instruction.

Inspection.

During the week before the Summer vacation, Captain Grenfell, Chief Inspector of Physical Training, accompanied by Miss Perry, visited the following Schools with me, and inspected the work:— Boys' Council, Boys' National, Girls' Council, and Greystoke Schools, Penrith; Frizington St. Paul's, Cleator Council, Montreal Boys', Cleator Moor, Moresby, Distington, Little Clifton, and Brigham Schools, Cockermouth. In addition to these Captain Grenfell visited Whitehaven Secondary School.

County Schools Football Association.

On April 7th, the final of the competition under the auspices of the above Association took place at Whitehaven, between Egremont Bookwell Boys and Parton Williamson's, Egremont eventually winning the Shield. Throughout the competition everything was fair, and good sportsmanship prevailed. One of the aims of this Association is to develop the liking for games among the boys of the outlying districts, and to help to brighten up their somewhat quiet lives by an occasional competition with a team of boys from the town. Mr. Jas. Mc.Gowan, Chairman Secondary Education Committee presented the Shield and Medals to the winners, and complimented the boys on their fine enthusiasm.

DEMONSTRATIONS.

A very successful Demonstration was given in the Temperance Hall, Brampton, by boys from the Council School, on April 11th, Lady Cecilia Roberts presided, and congratulated the teachers and boys on the splendid exhibition given.

A similar display was held on 11th May, in St. Andrew's Hall, Penrith, when boys from the National School gave an exhibition of Physical Exercises and games. Col. Turnbull presided, and gave a splendid address to the boys on the importance of Physical Training. He also congratulated the teachers on the way they handled their classes. On "Parents" Day, at Penrith Boys' Council School, a very effective Demonstration was given, and great interest was shown by the parents and friends present. The work was of a very high standard, and showed that every attention has been given to the Physical Training throughout the School.

At Moor Row Council School, on July 21st, a display was given by the Senior boys, under the direction of Mr. Potts, and Miss Moulson gave a similar display with the girls. It was much appreciated by all present.

At the Cleator Moor Demonstration, on 23rd June, boys from eight local Schools (200 in all) took part. The rehearsal on Thursday night was attended by over 600 children, and the interest shown by them in their school fellows who were taking part was very gratifying. There was a splendid turnout of parents and friends, and also about 50 local teachers.

A very large audience assembled at the Co-operative Hall, Maryport, on December 19th, when boys from the five Local Schools gave a display of Physical Exercises, Dancing and Games. At the rehearsal the previous evening, 780 children were interested spectators. Mr. Hardy, C.C., presided, and spoke of the splendid work that was being done in the Schools in connection with physical training, which enabled the children to get the best out of life, and to make them realise the value of good sport, and enable them to have sound minds and healthy bodies.

These demonstrations make an excellent impression in the respective districts, and have been greatly appreciated.

Sports.

School Sports were held at Cockermouth, on Saturday, 8th July, but had to be postponed owing to rain, and were finished on Monday, 17th July. Compared with last year, there was an increased number of entrants for the various competitions, nearly all the Schools in the district being represented.

The teachers organised the meeting, and great credit is due to them for the prompt way in which the different items were gone through.

At Kirkbride School they held their Annual Sports on June 29th. By the keen interest shown at this School, it looks as if the sports will become one of the most important events in the village.

At Spelter Works, in the school playing field, on Saturday, 15th July, sports for the three local schools, Spelter Works, Hallbankgate, and Midgeholme, were held. The competition was keen in every item, and there was a large gathering of parents and friends.

Evening Play Centre.

As part of a scheme whereby the children of Wigton could meet during the winter evenings for healthy recreation, a meeting of parents, children, and friends, was held at the Public Baths, on Tuesday evening, 28th November.

A demonstration of organised games was given by a class of boys from the Secondary School, which was highly appreciated. There was also a good display of games and dancing by girls from the Church of England School.

It must have been very gratifying to the promoter's to see the children so happy, and parents and friends so interested.

SECONDARY SCHOOLS.

Carlisle Grammar School.

The Physical Training at this School is taught on modern lines, and very regular periods are given. The team system has been introduced, and is working well. The games and athletic side receive generous attention.

Brampton County Secondary School.

No progress has been made in the securing of a suitable gymnasium here. This is most unfortunate as the children thoroughly deserve it. Every boy in this School is suitably and neatly attired for the Gymnastic lesson, and good work is being done under very adverse conditions.

Wigton Nelson School.

A very successful exhibition of Physical Exercises, Dancing, Self-Defence, Ambulance and Exercises on the Horse, was given on April 6th, by boys from the above School, in the Public Baths, Wigton. The work shown was a credit, not only to the boys themselves, but also to the two Assistant Masters, who are responsible for the Physical Training. Swimming also receives careful attention at this School, and 60 per cent. of the boys can swim. Twenty secured the Proficiency Certificate of the Life Saving Society, and fourteen were awarded medallions.

Alston Samuel King's and Millom Secondary Schools.

Both Schools have good gymnasiums, and the services of an expert (man) for the boys, especially the senior boys, is very much wanted.

Workington County Secondary School.

The building of another gymnasium here may have to be considered as many classes have to be taken out-of-doors, and this in winter has many disadvantages.

Considering the time given the work is quite good, but to bring it up to a higher standard exactly double the time should be given.

Whitehaven County Secondary School.

On Thursday, July 20th, the boys at this School had their first school competition in Physical Exercises. Practically every boy in the School took part, and showed keen determination to do the very best for his class. The standard of work was very good, there being only a few points between the best class and the weakest, thus showing the result of careful and regular tuition throughout the School. I acted as judge, and awarded Form VI. first place. The teacher, Mr. Smith, is to be congratulated on the result of his first year's work. A gymnasium would be a real boon to this School.

Keswick High School.

Full advantage is now being taken of the Gymnasium at this School, and an expert is shortly to be appointed by the Education Committee to give regular instruction to the boys.

Penrith Grammar School.

This School is surrounded by a beautiful playing field, and the School possesses a splendidly equipped gymnasium. Members of the School staff take all the Physical Training.

EVENING CLASSES.

Wigton.

A class for youths is being held at Wigton Public Baths, on Wednesday evenings, and a good number have been enrolled. The teacher reports that the students are very keen on the work. It is many years since they had a class of this description in Wigton, and one hopes for a revival of the old enthusiasm which then prevailed.

Penrith.

An evening class is being held for boys on Friday evenings in the well equipped gymnasium of Penrith Grammar School. One could not help being impressed by the fine carriage and smartness displayed by members of this class.

I would like to see a class for Physical Training established in every town and village in Cumberland, and I appeal to Headmasters of Evening Schools to consider this when making up their programme for next winter.

TEACHERS' CLASSES.

Workington.

A class for men is being held in the Workington Secondary School Gymnasium, on Wednesday evenings. This class was originally intended for the Workington teachers, but many of the County men have availed themselves of the opportunity. The attendance is good considering that 50 per cent. of the men have served in H.M. Forces during the war, and have suffered physically. All the work of the class is entered into most heartily. A class of boys attend regularly from the Higher Standard School, Workington, for the purpose of demonstration.

Whitehaven.

Another class for men has been arranged and will be held in the Irish Street Council School Hall, Whitehaven, beginning January 23rd 1923.

RECOMMENDATIONS.

1. Improvement of Playgrounds.
2. Provision of a class in Physical Exercises at each Evening School Centre.
3. Appointment of full-time man for Secondary School work.

I beg to thank the Committee for their kind consideration during the year, and the teachers for their hearty co-operation.

W. S. GRAY,

Chief Man Organiser of Physical Training.

APPENDIX F.

80 LOWTHER STREET,

WHITEHAVEN,

February, 1923.

MEDICAL REPORT, 1922.

WHITEHAVEN COUNTY SECONDARY SCHOOL.

Seventy-three new pupils were examined during the year 1922, and twenty-seven others were specially re-examined for defects, etc., found on previous examinations. In addition, many minor casualties in the School were attended to, and other cases examined for some cause at the request of the Headmaster, *e.g.*, child with possible infection.

Of the seventy-three new cases examined, only 26 could be passed as absolutely normal, *i.e.*, just over 35%.

As last year the largest number of defects were under the heading of Physical development, no less than 25, *i.e.*, over 33% having round-shoulders, flat chest, or some slight lateral curvature. In the main these cases can be cured by attention from the Drill instructors ; and there can be no doubt, judging by similar cases which have been re-examined, that those cases which have been taken in hand and given special remedial drill, etc., have progressed very well indeed. As I have pointed out before in previous Reports, the physical defects are frequently secondary to some other defect such as "eyesight" or "enlarged tonsils and adenoids." It is obvious, therefore, that where this combination exists the due attention to these above-mentioned defects is imperative. Unfortunately too often the parent does not recognise this, or looks on it as a whim of the medical examiner.

Tonsils and Adenoids.

Fifteen, or about 20% of the new pupils, have enlarged tonsils or adenoids. Some of these were not very large, and apparently give rise to no trouble. It is as well, however, that they should be noted, as subsequent events (*e.g.*, slow development mental and physical) may suggest their increase in growth, and need for surgical interference.

Teeth.

I noted eight pupils who very definitely had need of attention from the Dentist.

Six cases of *defective vision* were observed. This is a great improvement on former years.

My re-examination in eye-cases show that many cases have not received any attention at all. This is very deplorable. The defect will tend to get worse if left alone, and besides must undoubtedly handicap the child in his or her scholastic work. I am afraid also in some cases even after spectacles are obtained they are not used. I have frequently found when I have examined the pupils that the spectacles have been "left at home."

Two years ago there were an extraordinary number of goitres, as I then found 21 cases. Last year there were five, and this year there are only four, and all are slight.

Heart.

There is only one case of organic heart disease, and he is being kept under observation. Three others show some functional disturbance, chiefly in the way of slight enlargement, probably due to overstrain. For a time they were stopped their more violent exercises, and have now resumed them under observation.

Lungs.

A few pupils have had obvious colds and coughs when examined, but no tubercular cases were found.

Four had, however, some sign suggesting "weakness" or the possibility of tubercular developments, and are under strict observation.

There were eight cases of anaemia, and four cases of skin trouble, all, however, non-infectious and non-contagious.

RE-EXAMINATIONS.

Special re-examinations were made of twenty-seven pupils, who had previously been reported by me as needing further examination. This is in addition to a short examination of the pupils who had been already passed by me some time previously as normal. These examinations chiefly cover such cases as heart trouble due to overstrain; those pupils needing physical drill, etc. Of ten heart cases examined two were cases of definite organic disease and were in *statu quo*. Six of the remaining eight were improved, and the other two still showed evidence of over-strain. Six cases needing Physical Drill were re-examined, and only two of these could be passed as cured. The remaining four still needed more physical drill. Probably these cases need taking in hand somewhat more systematically; the ordinary School drill is not enough.

Four eye cases were examined, and it was found that two of them had not received any attention since the previous examination, and three out of four cases of enlarged tonsils had been neglected in the same way.

Re-examination of goitre cases were only four this year; two of these had improved, and had had treatment; the remaining two were only slight ones.

Two "suspects" of lung trouble were re-examined and found to be much improved.

The remaining re-examinations were :—

- 1 child who was especially nervous.
- 1 with a deviated septum nasi.
- 1 case of pediculi—the head.
- 2 who were now passed as normal.

The case of pediculi was a case sent to me by Mr. Clifford, in a child who had been absent from School for some "eczema, and other irritation" of the scalp ; and came back without a medical certificate. But for the prompt action of the Headmaster, and my thus finding this case out at once, this might very easily have spread to other pupils.

Finally, I have to report further examination of the School rooms and buildings generally, with satisfactory results.

G. BERTRAM MURIEL, B.A., M.B.,
B.C. Cantab.